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Micromorphological and geochemical investigation of formation processes in the refectory at the Castle of Margat (Qal'at al-Marqab), Syria

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ABSTRACT

Margat Castle, located on the eastern coast of Syria, is an outstanding example of architecture from the Crusader Period, and the most important castle of the Hospitallers, who were one of the most famous Christian military orders during the medieval period. Excavations by the Syro-Hungarian Archaeological Mission have been conducted with the aim of better understanding the history and material culture of this important part of Syrian heritage. Whilst large scale excavation and architectural analysis can provide an understanding of broad changes over the lifetime of the monument, high resolution studies of deposits are essential to understand their formation processes, and to test hypotheses suggested during excavation. In the refectory at Margat, a series of dark deposits overlain by a pale 'ashy' layer, were hypothesised to be the result of a large-scale burning event. In this study we aimed to test this hypothesis by conducting micromorphological and geochemical analysis of the sequence, the first application of microarchaeological techniques to medieval deposits in Syria. It was observed that the composition of the deposits relates to degradation of anthropogenic debris and constructional material through cycles of wetting/drying and microbial and faunal activity, rather than fire/destruction debris. These observations have clarified important changes in the castles' function associated with multiple phases of ownership.

Keywords: formation processes, micromorphology, Margat, Syria, crusades, use of space

1. INTRODUCTION

Margat citadel, (Qal'at al-Marqab) is one of the most outstanding and best preserved monuments dating from the Crusader Period (1095-1291 AD), and was the most important castle of the Order of St John, otherwise known as the Knights Hospitaller (Figure 1). The site is an important part of Syrian heritage reflecting the influence of several civilizations during its thousand year long history. The first castle is thought to have been built by the local inhabitants in the year H. 454 (1062/63 AD) (al-Hamawī nd). After a brief period of Byzantine occupation that began around 1104 (Comnena 2003: 365 [1143 - 1153]), it was taken by the Franks (Crusaders) in 1117/18 AD, less than two decades after the capture of Jerusalem and the establishment of the crusader states in the Holy Land. The castle is thought to have reverted to Muslim ownership in the 1130s (Deschamps 1973) and was recaptured by Renaud II Mazoir in 1140 (de Caschifelone 1895). The Mazoirs were one of the highest-ranking baronial families in the Crusader principality of Antioch, and were responsible for building most of the earliest surviving structures at Margat. In 1187 AD, the Mazoirs transferred Margat to the Order of St. John (Mayer 1993: 176, Delaville le Roulx 1894–1906).

The importance of the castle to the Hospitallers is reflected in the fact that its acquisition resulted in the immediate reorganization of the regional administration (Riley-Smith 1967: 431), and the Hospitaller castellan of Margat became one of the highest ranking officers in the hierarchy of the Order in the Latin East (Burgtorf 2007: 222). Although it cannot be proven that the castle ever functioned as the seat of the Order between the fall of Jerusalem in

1187 AD and the retaking of Acre in 1191 AD (Abdazzāhir 1961[1290]), the fact that the Chapter General of 1204/06 met there and established the rules that officially militarised the Hospitallers indicates its prestigious status (Burgtorf 2006: 220-21; 236).

By the beginning of the 13th century Margat had become the most important administrative centre of the Hospitallers in Syria and one of the largest fortified Crusader sites (Major 2008). As well as the castle itself, Margat included an outer suburb that covered an estimated 10 hectares of the western slopes of the mountain, and there were more than a thousand armed men employed for service, even during peacetime (de Sandoli 1983). As was the case with other castle garrisons of the military orders, only a small part of the garrison belonged to the sergeants at arms who were the Hospitaller elite. However due to its prominent position amongst the Hospitaller hierarchy there are likely to have been a relatively high number of full members of the Order serving here, especially after the fall of the famous sister castle, Crac des Chevaliers in 1271 AD.

Margat was amongst the castles that resisted Muslim reconquest the longest, falling to the armies of the Mamluk Sultan Qalāwūn on 25 May 1285 after a five week siege (Abdazzāhir 1961: 77-81). According to contemporary sources, the Sultan agreed to a peace offer to save the castle from further damage and the destruction caused by the siege was repaired immediately. After the expulsion of the Crusaders the castle began losing its importance, and although it is still mentioned until the 19th century as the administrative centre of the region, its diminishing role during the Mamluk and Ottoman periods is reflected in the reduced scale of building activity.

1.1 Environmental setting

Margat is located 360 metres above sea level on the eastern coast of the Mediterranean Sea between Tartūs and Bānyās (Fig 1) in the coastal area of Jableh, part of the historic Principality of Antioch (Deschamps 1973: 259-285). The surrounding area is composed mainly of limestone, with small outcrops of basalt, and the beach between Tartūs and Bānyās is composed of coarse grained basalt sand with large pebbles. The climate in the region is heavily influenced by the coastal setting and the Jabal Ansāriyya mountains, with annual precipitation being almost 500mm higher around Latakia and Tartūs than inland. In the winter precipitation originates from the North Atlantic and Mediterranean Sea, whilst in summer subtropical high pressure systems inhibit rainfall except during thunderstorms (Kaniewski et al. 2011). During the Crusader Period (AD 1095 – 1291), the region was generally humid, following the relatively dry conditions in the Muslim Era (AD 640–1095). Local vegetation during the Crusader Period was dominated by mixed drought tolerant trees and xerophytic shrub steppe (Kaniewski et al. 2010).

1.2 The Refectory

One of the main objectives of the Syro-Hungarian Archaeological Mission research programme was to identify the functions of the various constructions that made up the citadel. Another important question was whether the Muslim takeover modified the original functions in the spaces excavated and analysed. Given the presumably large size of the contingent of Hospitaller knights stationed at Margat and their monastic lifestyle, requiring a communal life that included shared meals, a hall of suitable size had to be located in the central part of the castle. Based on architectural analysis, this refectory hall has been identified as the great barrel vaulted hall situated in the western edge of the Hospitaller citadel overlooking the coast (Figure 1), and was one of the first constructions erected in Hospitaller Margat. Being close to the chapter house, the dormitory and the chapel, the

refectory hall was bordered in the north by a kitchen building with a chimney, where a central cooking area comprising of four ovens was excavated, and which had a southern doorway opening into the refectory. The refectory also had a large vaulted storage area beneath it, with two circular ventilation shafts making possible the elevation of barrels (presumably containing wine) with the help of pulleys. The hall was also in close proximity of the central freshwater storage area of the citadel and the immediate vicinity had latrines located on three levels.

The interior area of the hall measures 25.6 x 9.5 m and is lit by a double row of windows from the West. This combined with the presence of a series of corbels in the sidewalls and the fact that the kitchen door opens at half the height of the northern wall of the hall makes it evident that the refectory was divided horizontally by a wooden mezzanine floor. The upper floor had its own doorway that could be reached by a wooden staircase from the neighbouring courtyard and it might have served as the refectory of the knights. The space beneath the wooden mezzanine floor might have been the dining area of the sergeant-at-arms, who were second in the Hospitaller hierarchy. The eastern wall of the lower area preserved a number of evenly arranged thin putlog holes, which indicate the presence of wooden shelves attached to the wall. The careful study of the corbels, combined with the results of the excavations which uncovered traces of the foundations on which the wooden pillars were standing, enabled a precise theoretical reconstruction of the wooden structure. Excavations directed by Zita Hrabák also found that during a later period, two lightly constructed division walls were inserted flanking the ground floor doorway, whilst the northern part of the ground floor room saw the insertion of dozens of huge earthenware storage jars into the clay floor. The jars were later destroyed and layers of “ashy” and black deposits covered them (Figure 2, Table 1). As the Crusader Period refectory was characterized by the presence of huge wooden structures it would have been logical to assume that these layers might have been created by

the destruction of the siege of 1285. This would also have meant that the construction of the partitioning walls and the insertion of the storage jars was the work of the Hospitallers. A detailed analysis of the layers was thus crucial not only for determining the origin of the layers, but was also expected to yield decisive information for the periodization of the building phases of the hall.

Understanding the formation processes of deposits is fundamental to understanding the archaeological record, and interpretation of human occupation and activity (Schiffer 1987). These include both natural and anthropogenic processes and post-depositional impacts such as trampling, biological reworking, and diagenesis. Thin section micromorphology is a technique originally developed to study the formation processes of soils, and is now widely used in archaeology to examine the nature of stratigraphy that is too fine to see by eye (Matthews et al. 1996), and to identify the composition and mode of formation of materials whose origin may not be clear at the macroscale. It has been used extensively to investigate formation processes and activities at prehistoric sites (e.g. Shahack-Gross et al. 2005, Shillito et al. 2011), and has increasingly seen wider applications in historical and medieval archaeology (Devos et al. 2013, Milek 2012, Novák et al. 2012).

The use of micromorphology has enabled a better understanding of the formation of floor deposits in medieval buildings (Gerhardt and Langohr 1999), and the identification of post-depositional processes, which can have a significant impact on stratigraphy and preservation. Combining thin section micromorphology with chemical microanalysis (e.g. Milek and Roberts 2013) provides information both on the micro context and the chemical composition, which greatly enhances interpretation of both formation processes and reconstruction of activities (Menzter and Quade 2013). There are several techniques available for analysing the geochemical composition of deposits, one of the simplest and most cost-effective is the use of infrared spectroscopy (FT-IR), which has been successfully combined with micromorphology

to investigate for example, the mineral composition of calcareous ashy deposits (Scheigl et al. 1996, Karkanis et al. 2007), deposits associated with burning activities, and the makeup of floor deposits (Matthews et al. 2013). FT-IR is a type of vibrational spectroscopy which provides information on the chemical bonds present and the overall structural composition of the sample. X-Ray Diffraction (XRD) has perhaps been used to a lesser extent. It provides information of the specific atomic and molecular structure of a crystal, making it much more specific for identifying the types of minerals, including clays. The techniques are often used in combination in non-archaeological studies, including cultural heritage conservation, to characterise materials (Moroupoulou et al. 2000, Silva et al. 2005, Elsen 2006).

These methods were therefore chosen as a suitable combination to characterise the sequence of deposits in the refectory and reconstruct their formation processes, in order to test whether they are the result of burning or another activity. Correct identification of such an activity has implications for understanding the history of this monument, an important part of the Syrian heritage.

2. METHODS

2.1 Thin Section Micromorphology

Three large undisturbed block samples were collected for micromorphology by cutting directly from the section and wrapping securely with tissue and tape. Samples were collected to provide overlapping coverage of the entire exposed sequence of deposits (Figure 2). The samples were oven dried and impregnated with epoxy resin under vacuum, and hardened overnight at 70°C. 30µm thin sections were prepared using Brot and Logitech thin sectioning machines. Thin sections were examined using a Leica DM750P polarising microscope under plane (PPL) and cross (XPL) polarised light with an integrated ICC50 HD camera.

Descriptions were carried out according to the standard terminology of Stoops (2003).

2.2 FT-IR and XRD

Bulk samples for FT-IR and XRD were collected from selected layers visible in the field, adjacent to the block sample (Figure 2). Around 1g of the sub-samples were crushed in an agate pestle and mortar, oven dried to remove residual water and pressed into KBr discs. KBr discs were analysed by FT-IR with a Perkin-Elmer Spectrum 100 FT-IR Spectrometer, and spectra obtained between $4000\text{-}400\text{cm}^{-1}$ at 4 cm^{-1} resolution. FT-IR peak assignments were carried out by comparison with published reference material, including Weiner (2010) and Farmer (1974). Around 1g of the sub-samples were analysed by XRD using a Bruker D8 Powder Diffractometer. XRD interpretations were carried out by comparison to the International centre for Diffraction Data (ICDD) reference library.

3. RESULTS

3.1 Thin Section Micromorphology

Field observations of the deposits indicate a sequence comprising a thin lens of black material at the base of the sequence, overlain by a yellow/brown deposit containing occasional fragments of charcoal and grading into a darker brown deposit at the top. This is overlain by a compact, pale blue-grey deposit which grades into a whiter blue-grey, described as 'ashy' in the field. The top of the sequence comprises a very hard, compact grey deposit, with a second, discontinuous black layer containing mortar fragments. The black lenses vary in thickness across the room and were suggested to be charcoal and burnt debris layers. Under the microscope this sequence could be resolved in more detail. Micromorphology descriptions are summarised in Table 1.

The lowermost deposit of slide 1 (corresponding to the brown/black layer, Figure 2C), has a diffuse boundary between paler and darker brown deposits, which consists of amorphous organo-mineral material containing fragments of limestone, lime mortar and basalt pebbles. This layer is bioturbated and features coatings, and 5-10% microcharocal and bone fragments (Figure 3A). This is overlain by the 'ashy' deposits which similarly contains fragments of lime and basalt pebbles, along with fungal spores and mesofaunal pellets (Figure 3B and 3C).

The lowermost 'black' deposit of slide 2 (roughly equal to the lowermost deposit of Slide 1) is a complex organo-mineral deposit, distinguished in thin section by its dark brown colour, and anthropogenic inclusions such as degraded bone (Figure 3A) and charcoal ranging from 5-10% in abundance, and the presence of calcareous spherulites. The microstructure is vughy to massive, with chamber and channel voids present alongside vughs, resulting from the dissolution and subsequent welding of components (Stoops 2003:65). Under XPL the fabric is largely undifferentiated, presumably due to the higher proportion of fine clays and brown amorphous organic material in the fine fabric. A faunal burrow c.20mm in diameter can be seen at the macroscale, similar to those created by molluscs, and smaller channel voids are present at the microscale with internal coatings of infilled fine organic material produced by faunal excrement (Kooistra and Pulleman 2010).

The boundary with the overlying deposit is diffuse, with a gradual transition from this organo-mineral layer to a dense layer of amorphous organic material. This is identified as containing animal dung through the presence of distinct pellets embedded in the groundmass along with calcareous spherulites at 10-20% abundance. The b-fabric is a mix of undifferentiated and crystallitic, with some of the pellets being highly birefringent and blue in XPL. Mineral inclusions such as basalt are relatively low in abundance in this layer, at less than 5%, whilst organic inclusions such as phytoliths are present at around 5% abundance, embedded within the dung pellets and also the groundmass.

The boundary with the overlying yellow/brown unit is clear, especially at the macroscale, though at higher magnifications the transition is more diffuse. The unit is distinguished by a pronounced granular structure with packing voids, large channels and chambers. Animal dung pellets are present. It appears that this is a continuum of the underlying dung layer, which has been subject to a greater degree of post-depositional disturbance. Both deposits appear to be cemented together by the recrystallisation of calcareous material (Karkanis et al. 2007), which is distinct in XPL. Conjoined polyhedral phytoliths are present embedded within the deposits, and there is also significant iron and manganese staining (>20%) (Figure 3D) associated with microbial activity (Tebo et al. 2004) and cycles of wetting and drying (Sveinbjarnardóttir et al 2007, Lindbo et al. 2010:132). This is further supported by observation of fungal spores, areas of recrystallised ash and spherulitic siderite crystals within this layer and the underlying dung layer. Siderite forms in reducing conditions where there is an abundant source of iron in the soil (Milek 2012).

The uppermost sub-unit consists of a fine fabric of amorphous particles with occasional mineral and aggregate inclusions, with a geofuric related distribution. Inclusions are unoriented and randomly distributed throughout the groundmass suggesting pre-depositional mixing rather than in situ deposition. Inclusions include fragments of lime, ranging in size from 300µm to 1800 µm. Embedded within the larger lime fragments are inclusions of mineral grains and basalt pebbles, indicating that these are fragments of architectural mortar which have become incorporated into the deposit. Other inclusions include weathered monocotyledonous phytoliths and degraded microcharcoal (Figure 3F). The hard compact uppermost deposit has a massive structure and consists of mortar fragments within a highly birefringent calcareous lime deposit. The mortar fragments contain basalt pebbles, some of which are completely weathered. Other pebbles have a thin yellow weathering rim.

3.2 FT-IR and XRD

The FT-IR spectra are shown in Figure 4, the peak identification for FT-IR spectra are presented in Table 2. XRD identification is Table 3. The FT-IR spectra for all sub-samples are complex, relating to a mix of components including calcite, with varying amounts of phosphate and/or sulphate, clays, plagioclase and quartz. The strongest phosphate signal is in sub samples 2.3 and 2.4 (the 'ashy' layers) with a weaker signal in sub-samples 2.1 and 2.2 (the dark brown/yellow deposits). There are some features which are suggestive of sulphate, such as the weak broad peak around 1120 cm^{-1} however these are too weak to say this with certainty. It does however fit with observations of various sulphate compounds in thin section and in the XRD. Sub-sample 2.5 (the hard compact 'floor' layer) does not have a phosphate signal. There are weak peaks around 920 cm^{-1} suggesting the presence of clays. The presence of weak O-H stretches from structural hydroxyls, and O-H bends may result from plagioclase inclusions, which are also observed in thin section (Hof and Rossman 1985). Plagioclase signals are also seen in the powder XRD data for all sub samples. Illite formation has been associated with the weathering of plagioclase feldspar under semi-arid tropical climate conditions, and is perhaps the explanation for the presence of these peaks in the FT-IR spectra (Bétard et al. 2009).

The presence of biogenic aragonite in sub-samples 2.3 and 2.4 suggest the presence of shell, again corresponding with thin section observations, indicating degraded carbonate with shell fragments from the constructional debris. The uppermost deposit also contains halite and gypsum.

4. DISCUSSION

Observation of the deposits under the microscope, along with their chemical analysis, indicates a basal deposit of amorphous organic material and clays mixed with anthropogenic debris. The presence of calcareous spherulites in addition to phosphate nodules and faunal pellets in thin section, and the presence of apatite in the FT-IR indicate animal dung deposits make up a proportion of the groundmass. The presence of micro-charcoal and degraded bone inclusions are likely to be the result of anthropogenic activities such as food processing and cooking, however the random orientation and distribution of these inclusions throughout the deposit do not indicate that this is a primary activity, rather it suggests that these waste materials were incorporated into the deposit during its formation.

The composition and structure of these deposits suggests either a packed earth 'floor' or levelling deposit. Mortar fragments are observed at a higher frequency towards the top of the sequence, and may relate to a finishing layer of lime and/or the wash of such material from the ceiling. The difference in colour from the darkest material in the lowermost deposits, which appear almost black in the field, and the overlying brown/yellow deposits, is a result of post-depositional decay and variation in oxidation (as indicated by fungal spores and significant microbial activity), with the boundaries between these deposits being diffuse under the microscope. The varying thickness of the lower 'black' layer therefore could be related to variations in the rate of decomposition across the room, or due to variations in the thickness of the original floor 'packing' to create an even surface, as has been observed in post-medieval floor deposits in Iceland (Sveinbjarnardóttir et al 2007). The amorphous organic material may also relate to the decomposition of wood and would fit with our knowledge, based on architectural features, of the presence of a wooden mezzanine floor, and the hypothesis that the space beneath the wooden floor was reserved for the lower ranking sergeant at arms garrison.

Trampled dirt floors containing dung and other waste materials were not uncommon in medieval buildings, where they were constructed as part of a ground raising and/or levelling activity (Macphail and Goldberg 2010). Macphail et al. (2007) for example identified a sequence of mortar floors overlain by trampled 'soil' in 10th century Ottonian church deposits within Magdeburg Cathedral precinct, Germany. Such floors did not always have a formal 'hard' finishing layer.

The presence of iron in the dark layers may be a result of the decomposition of metal objects, such as nails, which were observed during excavation, and also from the weathering of basalt. Iron sulphide formation is associated with anaerobic environments, where sulphate reducing bacteria may convert sulphates into hydrogen sulphide which can then form mineral deposits with iron or manganese, typically causing opaque black deposits. Subsequent exposure to oxygen leads to the formation of sulphuric acid, and the acidification creates the yellowish mineral jarosite. This process tends to occur in sediments with a high organic content that have been exposed to seawater or saline seepage (Huisman 2009), which would fit with the identification of halite in the uppermost deposits. In the presence of lime we see the formation of gypsum instead, again fitting with the XRD data of the uppermost deposits. The presence of halite and gypsum in the uppermost layers indicates recent drying out of these upper layers leading to the precipitation of these salts, and is a further factor causing physical disaggregation of the floor. Recrystallised ash also suggests humid conditions and absorption of water by the ash deposits (Canti 2003), which fits with our knowledge of the climate in this region and other features of the deposits.

The 'ashy' deposit is shown by FT-IR and XRD to consist of a mix of calcitic material with inclusions of plagioclase, aragonite and quartz. The calcitic material comprises degraded lime mortar, as well as fragments of limestone. Unlike Crak des Chevaliers, which is composed mainly of limestone (Kennedy 1994), the primary building material at Margat is basalt. The

plagioclase is likely to have its origin in the basalt pebbles which can be seen in thin section, and which are known to have been used in floor construction and can still be seen in well preserved floors in other parts of the castle. In the refectory it appears that the floor is much more poorly preserved, with both the underlying packing and mortar floor being highly degraded. Significant microbial and mesofaunal activity observed in the deposits and the fluctuating humidity in this region may be factors in the degradation process. Such degradation is supported by the pellet structure of the sediments, which is typical of sediments subjected to mesofaunal bioturbation. In effect what we are seeing is the formation of an underlying acid sulphate 'soil', which has reacted with the lime rich architectural materials to cause widespread degradation.

An interesting point is that the XRD and IR data do not match exactly, for example some of the samples show aragonite in the XRD but not in the FT-IR. This confirms the heterogeneity of the deposits and demonstrates the value in using a range of techniques to characterise the samples, and also suggests caution should be when using these techniques to characterise heterogeneous archaeological deposits. Bulk methods of FT-IR and XRD by themselves do not reveal the complexity and spatial variation of deposit composition. Higher resolution methods of characterising materials such as μ -XRF and IR are likely to prove more informative in future studies (Menzter and Quade 2013, Matthews et al. 2013).

The hypothesis suggested in the field can be rejected. The dark layers do not relate to a burning/destruction event, but instead deposits represent processes in the post Crusader Period, from remodelling of the floor followed by abandonment, and sporadic use as an animal pen. Similar field observations of floor deposits have been observed in the Medieval Motte of Werken, which were also suggested to be the result of possible charring of wooden floors, when in fact they were a result of decomposition under reducing conditions, identified by micromorphology (Gebhardt and Langohr 1999).

5. CONCLUSIONS

The study gives an insight into the formation processes of deposits and the impacts of biological decay, and highlights the value of an integrated microarchaeological approach to reconstructing formation processes and interpreting stratigraphy within medieval buildings. During excavation it was hypothesised that the deposits in the refectory at Margat are a result of a sudden burning/destruction event. Whilst this hypothesis has been rejected, the alternative explanation is of equal importance. As the deposits include both animal dung and considerable quantities of mortar elements, presumably washed down from the plastered barrel vault and the walls by the leaking roofs, the results of this analysis point to the altered function and a long period of neglect in the history of the refectory hall. This makes it very probable that the wooden mezzanine floored refectory of the Hospitallers was remodelled by the Mamluks, who inserted the partitioning walls and the storage jars into the lower part of the refectory (Figure 1), but very likely keeping the upper level of the hall with the mezzanine floor. The consequent reduction of the communal dining space was not an issue for the new owners who did not have the same rules and whose numbers were much lesser than that of the previous garrison, reflecting the fact that Margat was gradually losing its importance from the 14th century onwards. The insertion of storage jars in Crusader storage areas would have its parallels in the nearby Crac des Chevaliers and the recently excavated similar jars in the kitchen area of Margat might also possibly date from the same period. However these areas seem to have continued with a function quite close to their original ones. No precise date can be calculated at the moment for the time when the wooden mezzanine floor disappeared and the presumed Mamluk insertions were cleared away to make space for the animals whose presence the geoarchaeology has proved, but it seems to have taken place sometime in the Ottoman period.

The use of microstratigraphic analysis of occupation surfaces has not yet become routinely adopted in the study of archaeological contexts from medieval buildings, however its importance in clarifying changes in function associated with multiple phases of ownership of the same structures is clearly evident. In the case of the re-use of Frankish sites in the crusader states from the end of the thirteenth century by strikingly different cultures, adopting this approach to intact archaeological deposits advances current understandings beyond the focus on architectural modifications.

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Figure 1: map showing the location of Margat and plan of the refectory. Plan produced by Ilona Györfy and József Vajda fotogrammeter@gmail.com

Figure 2: A. view of the excavations in the refectory B. and C. detail of the deposits studied showing the location of bulk samples for geochemical analysis.

Figure 3. Micrographs A. sub unit 1b of slide 1 showing degraded burnt bone inclusion B. sub unit 1c of slide 1 showing 1. lime mortar fragment with embedded basalt pebbles and 2. pellet structure of deposit from mesofaunal activity C. sub unit 1c of slide 1 showing fungal masses and hyphae D. sub unit 2c of slide 2 showing metal oxide staining.

Figure 4: FT-IR spectra of the bulk samples and detail of the 1600-400 region. Label 1 shows spilt peak indicating aragonite, label 2 indicates phosphate peaks.

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Table 1: peak assignments for the FT-IR spectra shown in in Figure 4.

Table 2: summary of minerals identified using powder XRD. Sub-samples refer to numbers shown in Figure 2.

Table 3: micromorphological descriptions.

Sub sample number						Peak Assignment	Major mineral/s responsible
1	2	3	4	5	6		
-	3699 (w)	-	-	3700 (w)	-	O-H stretch	Clay/ plagioclase structural hydroxyl
-	3630 (w)	-	-	3623 (w)	-	O-H stretch	Clay/ plagioclase structural hydroxyl
3407	3386	3407	3403	3396	3380	O-H stretch	Water/ Hydroxyapatite/ plagioclase structural hydroxyl
-	-	-	-	2514 (w)	-	Carbonate overtone/ combinations	Calcite
1799 (w)	1796 (w)	1796 (w)	1796 (w)	1796 (w)	-	Carbonate overtone/ combinations	Calcite
1625	1632	1635	1634	1635	1625	O-H bend	Water/ plagioclase structural hydroxyl/ gypsum h2O
-	-	-	-	1416	1417	Carbonate stretch	Calcite/ Aragonite
1422 (w)	1423(w)	1475 - 1423	1451 - 1422	-	-	Carbonate	Aragonite
1097 (w)	1092 (w)	-	-	-	-	S-O stretch	Gypsum/other sulphates
1122	1129	-	-	-	-	S-O stretch	Gypsum/other sulphates
-	-	1018	1012	1012	1019	Si-O-Si stretch/ phosphate stretch	Clay (illite), apatite
917 (w)	914 (w)	-	-	914 (w)	-	Al-O-H bend	Clay (illite), plagioclase
876	876	874	872	872	873	Carbonate out-of plane-bend	Calcite/ Dolomite
849	848	855	858 (w)	848	-	Carbonate out-of-plane bend	Aragonite
799/ 788	799	799/ 781 (w)	796/ 780 (w)	799/ 781 (w)	797/ 781 (w)	Si-O stretch	Quartz
713	713	713	715	712	713	Carbonate in-plane-bend	Calcite/ Aragonite
672	-	-	-	687 (w)	-	Sulphate bend	Gypsum
603 (w)	603 (w)	603	603	-	602	Phosphate and/or sulphate bend	Apatite, gypsum
563 (w)	-	569	565	-	562	Phosphate bend	Apatite

FT-IR (w) = weak

Table 1: peak assignments for the FT-IR spectra shown in in Figure 4. Sub sample locations are shown in Figure 2.

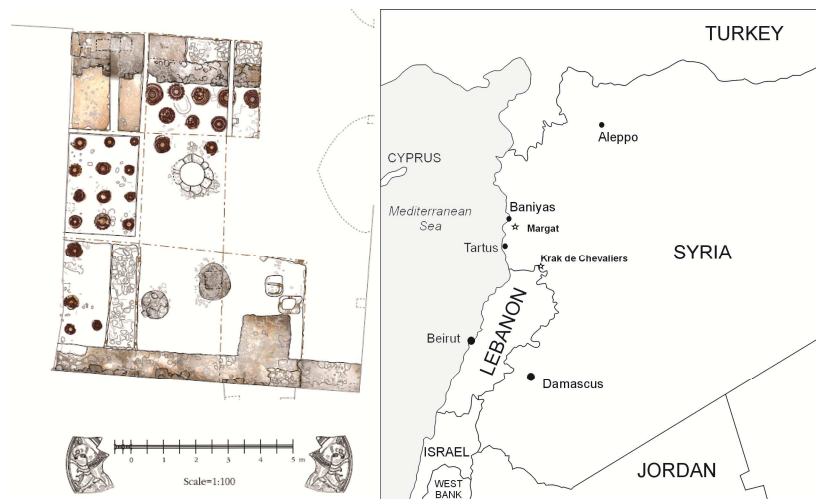
Sub sample/ mineral	1	2	3	4	5	6
Apatite		*	*	*	-	*
Aragonite		-	*	*	-	-
Calcite		*	*	*	*	*
Gypsum		-	-	-	-	*
Halite		-	-	-	-	*
Plagioclase		*	*	*	*	*
Quartz		*	*	*	*	*

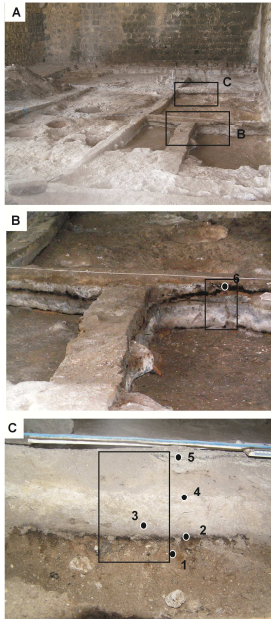
Table 2: summary of minerals identified using powder XRD. Sub sample numbers refer to locations shown in Figure 2. Note that we were unable to obtain data for sub sample 1.

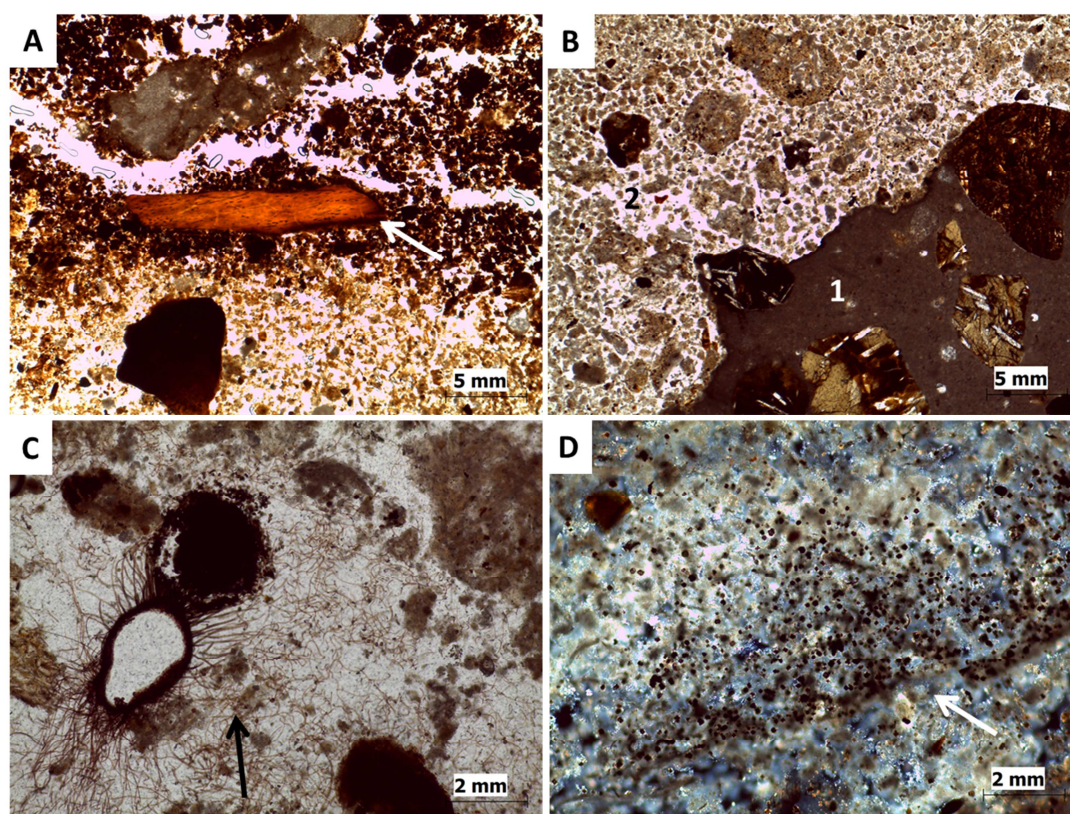
Slide/ Sub unit	Ground-mass	Boundary	Sorting	Voids	Basic micro- structure	Inclusions				Post-depositional alterations and pedofeatures
						Rocks/minerals/ aggregates		Bioarchaeological		
						1	2	1	2	
1C	c/f 70:30 coarse monic – close fine enaulic Crystallitic b fabric	Clear	Moderate	Complex packing, vughs, planar	Complex, granular - crumb	Basalt pebbles Foraminiferous limestone fragments Lime mortar fragments Plagioclase	<5% <5% <5% <5%	Occasional dung fragments Highly degraded bone fragments Fungal spores and hyphae	<10% <5% 5-10%	Smooth ellipsoidal microfaunal pellets Areas of Mn and Fe staining Calcite hypocoatings,
1B	c/f 70:30 Amorphous brown, undifferentiated, organo-mineral	Clear	Moderate	Complex packing, planar	Complex, granular - crumb	Angular to sub-rounded lime fragments Sub-angular to sub-rounded basalt pebbles	<5% 5%	Microcharcoal Burnt bone Shell fragments	<10% <5% <5%	Recrystallized carbonate nodules
1A	Large lime/calcareous fragments with embedded mineral inclusions	Diffuse	Unsorted	Cracking and chambers	Complex	Lime mortar fragments Basalt pebbles (embedded in lime) Foraminiferous limestone fragments	10% 10% 5%	Microcharcoal Degraded bone fragments	<5% <5%	Areas of bioturbation Calcite coatings
2E	c/f 10:90 gefuric >50%	Clear	Unsorted	Regular and star-shaped vughs, smooth.	Vughy	Sub-rounded to sub-angular lime fragments and mortar Rounded basalt pebble Amorphous phosphate	5- 10% <5% <5%	Micro-charcoal Weathered monocot phytoliths Recrystalied ash rhombs	<5% 10%	Cracking Mesofaunal pellets
2D	c/f 10:90 Crystallitic to undifferentiated b- fabric	Clear	Unsorted	Regular and star-shaped vughs with chambers and channels, smooth	Vughy	Rounded basalt pebbles Amorphous phosphate	<5% <5%	Microcharocal Degraded burnt bone Calcareous spherulites Grass phytoliths	10% <5% <5% 5-10%	Crystalline coatings Mesofaunal pellets Spherulitic siderite nodules (iron carbonate)
2C	Granular	Sharp	Unsorted	Complex	Complex,	Phosphate minerals	5%	Microcharocal	<5%	Areas of metal oxide speckling

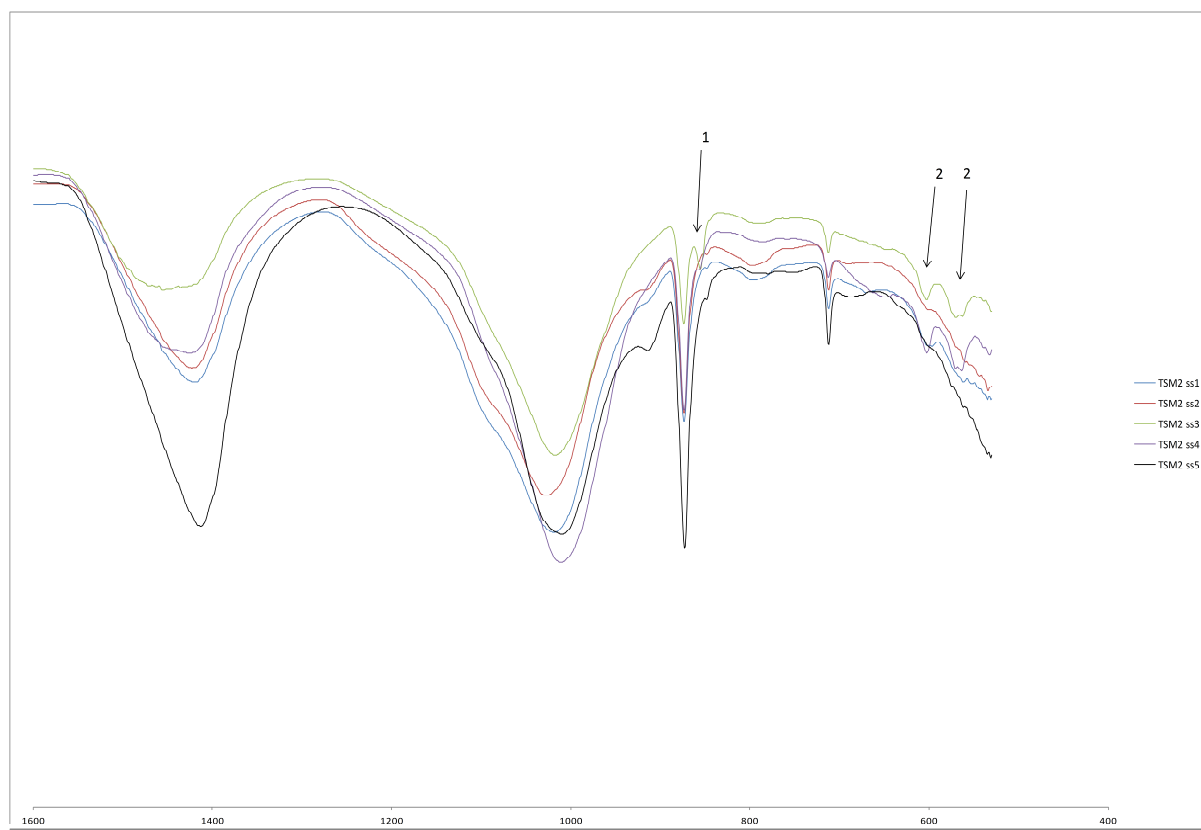
	Crystallitic b-fabric			packing with large channels and chambers	granular – crumb with vughy areas			Polyhedral conjoined phytoliths Animal dung pellets Calcareous spherulites	<5% Clustered 10% 10-20%	from ?microbial activity
2B	Crystallitic to undifferentiated b-fabric	Clear	Unsorted	Regular and star-shaped vughs, pseudomorphic plant voids	Vughy	Rounded basalt pebbles	<5%	Layered animal dung pellets Calcareous spherulites Grass phytoliths Fungal spores and hyphae (globose warted)	10-20% 10-20% 5% <5%	Bands of metal oxide speckling from ?microbial activity Spherulitic siderite nodules (iron carbonate) Mesofaunal pellets Recrystallised ash
2A	Undifferentiated, organo-mineral matrix, highly variable	Clear	Unsorted	Occasional chambers, channels	Vughy	Rounded basalt pebbles with calcitic coatings Lime fragments Clay aggregates	<5% 5% <5%	Microcharoal Calcareous spherulites	<5% 10-20%	Mesofaunal burrowing (molluscs + insects)

Table 3: micromorphological descriptions. Position of slides shown on Figure 2.









Highlights

- Geoarchaeology used to test hypothesis that deposits in Margat castle are result of burning event
- Hypothesis rejected, analysis indicates post-depositional decay of organic and architectural material
- Enabled reconstruction of life history of this important monument
- Observations clarified important changes in castle function associated with multiple phases of ownership

Wavenumber

4000	97.86538	98.45033	99.09147	98.78867	98.14668
3999	97.86269	98.4494	99.09072	98.78632	98.14655
3998	97.86001	98.4425	99.08997	98.78281	98.1415
3997	97.85545	98.43286	99.08779	98.77979	98.13476
3996	97.85199	98.42626	99.08512	98.77807	98.13047
3995	97.85079	98.42699	99.08257	98.77756	98.13078
3994	97.85197	98.43501	99.081	98.77805	98.13495
3993	97.85502	98.44596	99.08162	98.77911	98.13992
3992	97.8587	98.4537	99.08492	98.77962	98.14173
3991	97.86141	98.45436	99.08999	98.77852	98.13844
3990	97.86234	98.44883	99.09504	98.77607	98.13199
3989	97.86179	98.44108	99.09837	98.7737	98.12643
3988	97.86049	98.43435	99.09915	98.77261	98.12416
3987	97.85921	98.42962	99.09774	98.77334	98.12494
3986	97.85877	98.42705	99.0955	98.77601	98.12775
3985	97.85957	98.42706	99.09384	98.77986	98.13188
3984	97.8613	98.42941	99.09348	98.78293	98.13621
3983	97.86365	98.43252	99.09461	98.78342	98.13943
3982	97.8665	98.43472	99.09689	98.78172	98.14161
3981	97.86876	98.43569	99.0989	98.77984	98.1441
3980	97.86798	98.43652	99.09855	98.77883	98.14755
3979	97.86298	98.4386	99.09531	98.77807	98.15079
3978	97.8565	98.44245	99.09178	98.77693	98.15198
3977	97.85308	98.44657	99.09139	98.77578	98.14971
3976	97.85397	98.4475	99.0942	98.77471	98.14319
3975	97.85536	98.44233	99.09615	98.77284	98.13334
3974	97.85303	98.43205	99.09345	98.76993	98.12391
3973	97.84752	98.42172	99.087	98.76781	98.1198
3972	97.84352	98.41639	99.0818	98.769	98.1228
3971	97.84446	98.41695	99.08224	98.77387	98.12966
3970	97.84873	98.42004	99.0882	98.77958	98.13517
3969	97.85144	98.4212	99.09531	98.78185	98.13656
3968	97.84942	98.41845	99.09871	98.77843	98.13496
3967	97.84439	98.41363	99.09699	98.77141	98.1332
3966	97.84113	98.41088	99.09298	98.76602	98.13313
3965	97.84273	98.41309	99.09058	98.76628	98.13433
3964	97.84794	98.41909	99.09095	98.7713	98.13468
3963	97.85304	98.42429	99.09176	98.77635	98.13249
3962	97.85551	98.42477	99.09011	98.77776	98.12807
3961	97.85543	98.42098	99.08574	98.77636	98.12341
3960	97.85438	98.41733	99.08127	98.7758	98.12051
3959	97.85405	98.41837	99.07975	98.77828	98.12066
3958	97.85557	98.42534	99.08202	98.78247	98.12442
3957	97.85877	98.43556	99.08597	98.78494	98.13092
3956	97.86181	98.44479	99.08842	98.78362	98.13766
3955	97.86252	98.45009	99.08754	98.77985	98.14212
3954	97.86035	98.45099	99.08351	98.77704	98.14356
3953	97.85622	98.44838	99.077	98.77692	98.1425
3952	97.85137	98.44353	99.06858	98.7775	98.13896
3951	97.84728	98.43859	99.06027	98.77561	98.13315
3950	97.84662	98.43655	99.05663	98.77102	98.12757
3949	97.8517	98.43855	99.06188	98.76689	98.12603
3948	97.86105	98.44181	99.07525	98.7662	98.12932
3947	97.86961	98.44258	99.09087	98.7694	98.1339
3946	97.8736	98.44089	99.10284	98.77563	98.13624
3945	97.87393	98.4404	99.10931	98.78418	98.13671
3944	97.87466	98.44342	99.11183	98.79365	98.13865

3943	97.87869	98.44756	99.11229	98.8011	98.14444
3942	97.88434	98.44828	99.11102	98.80348	98.15254
3941	97.88623	98.44444	99.10751	98.79988	98.15889
3940	97.88064	98.43878	99.10194	98.79138	98.16027
3939	97.86921	98.43345	99.09591	98.77949	98.15619
3938	97.85735	98.42803	99.09125	98.76613	98.14887
3937	97.85005	98.42175	99.08883	98.75419	98.14193
3936	97.84915	98.41619	99.08841	98.74678	98.13832
3935	97.85342	98.41466	99.0892	98.74564	98.13861
3934	97.86024	98.41884	99.08994	98.75026	98.14075
3933	97.86716	98.42686	99.0887	98.75832	98.14174
3932	97.87308	98.43463	99.08428	98.76686	98.1401
3931	97.87808	98.4393	99.07783	98.77395	98.13715
3930	97.88194	98.44055	99.07197	98.77929	98.13535
3929	97.88307	98.43907	99.06817	98.78339	98.13544
3928	97.87938	98.43546	99.06547	98.78624	98.13577
3927	97.8706	98.43085	99.06232	98.7871	98.13418
3926	97.86003	98.42732	99.05933	98.78556	98.13039
3925	97.85311	98.42647	99.05915	98.7821	98.12606
3924	97.8525	98.42761	99.06325	98.77768	98.12302
3923	97.85526	98.42887	99.06975	98.77349	98.12223
3922	97.85708	98.42941	99.07572	98.77079	98.12392
3921	97.85704	98.4298	99.07974	98.77058	98.12726
3920	97.85769	98.43163	99.08228	98.77356	98.13078
3919	97.86206	98.43686	99.0851	98.78005	98.13397
3918	97.87077	98.44583	99.09011	98.78907	98.13798
3917	97.88099	98.45532	99.09692	98.79727	98.14347
3916	97.88822	98.46048	99.10176	98.80057	98.1489
3915	97.88988	98.45958	99.10069	98.79784	98.15244
3914	97.887	98.45519	99.0939	98.79198	98.15413
3913	97.88253	98.45073	99.08596	98.78699	98.15498
3912	97.87882	98.44746	99.08187	98.78457	98.1551
3911	97.87639	98.44458	99.08344	98.78363	98.15376
3910	97.87442	98.44123	99.08871	98.78272	98.151
3909	97.87214	98.43712	99.09415	98.78204	98.14784
3908	97.87007	98.43225	99.09723	98.78335	98.14556
3907	97.87051	98.42713	99.09802	98.78833	98.14501
3906	97.87675	98.42346	99.09936	98.79694	98.14666
3905	97.89044	98.42319	99.10451	98.80621	98.14997
3904	97.90831	98.42566	99.11307	98.81094	98.15238
3903	97.92281	98.42785	99.11969	98.8082	98.1514
3902	97.9288	98.42858	99.11958	98.80108	98.14826
3901	97.92839	98.42938	99.11426	98.79563	98.14664
3900	97.92665	98.43103	99.1096	98.7946	98.14784
3899	97.92503	98.43229	99.10862	98.79568	98.14949
3898	97.92108	98.43231	99.10881	98.79562	98.14934
3897	97.91303	98.43228	99.10675	98.79395	98.14828
3896	97.90285	98.43381	99.10261	98.79215	98.1487
3895	97.8941	98.43778	99.09913	98.79163	98.15223
3894	97.88873	98.44527	99.09823	98.79322	98.15978
3893	97.8872	98.45657	99.10039	98.79709	98.1708
3892	97.88997	98.46793	99.10551	98.80206	98.18134
3891	97.89592	98.47183	99.11214	98.80575	98.18513
3890	97.90086	98.46524	99.11589	98.80697	98.18086
3889	97.90235	98.4532	99.11264	98.80586	98.17393
3888	97.90168	98.44279	99.10355	98.80177	98.16898
3887	97.90107	98.43846	99.09464	98.79567	98.16589
3886	97.90443	98.44079	99.09295	98.79333	98.16325
3885	97.91529	98.4466	99.10032	98.80072	98.16208

3884	97.92988	98.45293	99.11022	98.81643	98.16572
3883	97.93946	98.45947	99.1154	98.83227	98.17552
3882	97.93808	98.46524	99.1141	98.83881	98.18634
3881	97.92769	98.46704	99.10879	98.8324	98.18975
3880	97.91742	98.46279	99.10435	98.81862	98.18221
3879	97.91302	98.4558	99.10343	98.80699	98.16878
3878	97.91206	98.45266	99.10394	98.80181	98.15894
3877	97.91018	98.45575	99.10399	98.79916	98.15778
3876	97.90366	98.46105	99.10338	98.7924	98.1617
3875	97.89219	98.46275	99.10167	98.78067	98.16356
3874	97.88213	98.45851	99.09803	98.77059	98.16081
3873	97.8806	98.45162	99.09168	98.76951	98.15821
3872	97.88795	98.44726	99.08356	98.77863	98.1622
3871	97.89945	98.44593	99.07792	98.79196	98.17241
3870	97.91103	98.44274	99.07931	98.80107	98.17987
3869	97.92047	98.43492	99.08668	98.80271	98.17694
3868	97.92597	98.42773	99.09416	98.80106	98.16742
3867	97.92765	98.4275	99.09997	98.80098	98.16026
3866	97.9267	98.43317	99.10699	98.80336	98.15835
3865	97.92436	98.4384	99.1139	98.80705	98.1584
3864	97.92319	98.43875	99.11456	98.81069	98.15712
3863	97.92356	98.4346	99.10628	98.81252	98.15459
3862	97.92164	98.42936	99.09361	98.81122	98.1525
3861	97.91449	98.42596	99.083	98.8071	98.15158
3860	97.90437	98.42619	99.07692	98.8021	98.15188
3859	97.89727	98.43045	99.07466	98.7986	98.15297
3858	97.89803	98.43725	99.07483	98.79769	98.15327
3857	97.90508	98.44283	99.07534	98.79767	98.14984
3856	97.90938	98.44287	99.07305	98.79494	98.1409
3855	97.90294	98.43719	99.06661	98.78903	98.12945
3854	97.89514	98.43306	99.06234	98.78654	98.1222
3853	97.90276	98.43368	99.06783	98.78946	98.11934
3852	97.91364	98.43388	99.07592	98.79181	98.11628
3851	97.90881	98.43256	99.07796	98.7931	98.11684
3850	97.89476	98.43072	99.07837	98.79516	98.12395
3849	97.88461	98.42846	99.08197	98.79729	98.13396
3848	97.88238	98.42741	99.087	98.79847	98.14385
3847	97.88496	98.42999	99.09076	98.79912	98.15372
3846	97.88668	98.43632	99.09304	98.80091	98.16327
3845	97.88375	98.44219	99.0941	98.80443	98.16906
3844	97.87715	98.4411	99.09275	98.80765	98.16707
3843	97.87149	98.42983	99.08812	98.80785	98.15747
3842	97.87057	98.41278	99.08119	98.8057	98.14565
3841	97.87378	98.39869	99.07454	98.80625	98.1384
3840	97.87777	98.39355	99.07076	98.81461	98.13913
3839	97.88145	98.39659	99.07115	98.82928	98.14538
3838	97.88647	98.40225	99.0745	98.84082	98.15158
3837	97.89272	98.40586	99.07826	98.84082	98.1547
3836	97.89847	98.4072	99.08106	98.83086	98.15727
3835	97.90401	98.40908	99.0837	98.81955	98.16362
3834	97.9107	98.4142	99.08752	98.81371	98.17456
3833	97.9177	98.42237	99.09204	98.8136	98.18607
3832	97.92219	98.4301	99.09519	98.81421	98.19173
3831	97.92204	98.4336	99.09511	98.81075	98.18783
3830	97.91708	98.43243	99.09157	98.80303	98.17718
3829	97.90861	98.42954	99.08648	98.79436	98.16617
3828	97.89903	98.42816	99.083	98.78857	98.15915
3827	97.89208	98.42825	99.08325	98.78789	98.1566
3826	97.89154	98.42637	99.08612	98.7918	98.15749

3825	97.89725	98.41938	99.08738	98.79738	98.16169
3824	97.90319	98.40761	99.08288	98.80115	98.16939
3823	97.90077	98.39477	99.07234	98.80131	98.17744
3822	97.88956	98.38633	99.06113	98.79991	98.17995
3821	97.88264	98.38321	99.05734	98.79935	98.17298
3820	97.88642	98.38089	99.06015	98.79811	98.15892
3819	97.89087	98.38025	99.06125	98.79608	98.14689
3818	97.88759	98.38632	99.05897	98.7951	98.14413
3817	97.87817	98.4004	99.05831	98.79612	98.14885
3816	97.87119	98.41778	99.06307	98.79879	98.15281
3815	97.87397	98.43185	99.071	98.80117	98.15054
3814	97.88456	98.44087	99.07611	98.8019	98.14606
3813	97.89643	98.44561	99.07735	98.80057	98.14516
3812	97.9046	98.44419	99.07852	98.79635	98.14619
3811	97.90642	98.4346	99.08083	98.78939	98.1442
3810	97.90184	98.41983	99.0825	98.78274	98.13851
3809	97.89363	98.40839	99.08298	98.78155	98.1336
3808	97.88767	98.40784	99.08354	98.7892	98.13443
3807	97.88984	98.41561	99.08364	98.80218	98.14025
3806	97.89854	98.42098	99.07821	98.81205	98.1456
3805	97.90507	98.41831	99.06214	98.81425	98.14821
3804	97.90242	98.41158	99.03856	98.81004	98.1487
3803	97.89059	98.4092	99.01968	98.80426	98.14712
3802	97.88023	98.41683	99.01899	98.80338	98.1446
3801	97.88322	98.42875	99.03731	98.80786	98.14107
3800	97.89442	98.43476	99.05796	98.81155	98.13654
3799	97.90183	98.43376	99.06689	98.81102	98.13565
3798	97.90343	98.43062	99.06636	98.80681	98.14112
3797	97.90418	98.43009	99.06555	98.80147	98.15066
3796	97.90819	98.43386	99.06993	98.79823	98.16024
3795	97.9145	98.44013	99.0777	98.79849	98.16679
3794	97.91885	98.44541	99.08364	98.80073	98.16978
3793	97.91894	98.44628	99.08548	98.80161	98.17006
3792	97.91574	98.44115	99.08481	98.7985	98.16808
3791	97.9118	98.43227	99.08418	98.79216	98.16502
3790	97.90882	98.42421	99.08474	98.78622	98.1629
3789	97.90624	98.42015	99.08526	98.78377	98.16225
3788	97.90192	98.42026	99.08281	98.78465	98.16142
3787	97.89501	98.42315	99.0758	98.78624	98.15864
3786	97.88797	98.42759	99.06692	98.78635	98.15419
3785	97.88514	98.43243	99.06167	98.78539	98.15038
3784	97.88863	98.43664	99.063	98.78574	98.14966
3783	97.89648	98.44042	99.06878	98.78918	98.15367
3782	97.90436	98.44479	99.07494	98.79463	98.16258
3781	97.90818	98.44908	99.07939	98.79817	98.17335
3780	97.90665	98.45011	99.0824	98.79637	98.18045
3779	97.90208	98.44496	99.08472	98.79025	98.18006
3778	97.89688	98.43539	99.08556	98.78502	98.17383
3777	97.89125	98.42695	99.08374	98.78459	98.16642
3776	97.8854	98.42328	99.08006	98.7873	98.16019
3775	97.8805	98.42338	99.0768	98.78764	98.15383
3774	97.87763	98.42415	99.07502	98.78167	98.14625
3773	97.8769	98.42347	99.074	98.77057	98.13934
3772	97.87742	98.42049	99.073	98.76042	98.1358
3771	97.87889	98.41462	99.07218	98.75835	98.13561
3770	97.88231	98.40645	99.07122	98.76613	98.13595
3769	97.887	98.39967	99.0682	98.77778	98.13558
3768	97.89031	98.40025	99.06232	98.78612	98.1376
3767	97.89257	98.41105	99.05758	98.78879	98.14457

3766	97.89729	98.42721	99.06001	98.78798	98.15285
3765	97.90498	98.43863	99.07003	98.78701	98.15535
3764	97.91038	98.43861	99.08042	98.78712	98.1495
3763	97.90756	98.4287	99.08338	98.78747	98.14014
3762	97.89614	98.41543	99.07802	98.78707	98.13385
3761	97.88271	98.40514	99.07012	98.78693	98.13342
3760	97.8777	98.40195	99.06686	98.78975	98.13762
3759	97.88586	98.4054	99.07133	98.79577	98.14317
3758	97.89936	98.41007	99.07991	98.80087	98.14676
3757	97.90611	98.41004	99.08554	98.80066	98.14635
3756	97.90188	98.4034	99.08256	98.79459	98.14182
3755	97.88971	98.3924	99.06897	98.78496	98.13429
3754	97.87314	98.38056	99.04639	98.77397	98.12515
3753	97.85503	98.37006	99.01839	98.76216	98.11562
3752	97.84251	98.36123	98.99051	98.74945	98.10694
3751	97.84554	98.35254	98.97074	98.7373	98.09964
3750	97.86157	98.3415	98.96442	98.72848	98.09196
3749	97.87512	98.32929	98.96876	98.72641	98.08398
3748	97.87977	98.32126	98.9769	98.73242	98.08075
3747	97.87915	98.32306	98.9853	98.74263	98.08558
3746	97.87388	98.3365	98.99537	98.7498	98.09575
3745	97.86612	98.35562	99.01114	98.7493	98.10298
3744	97.86425	98.36907	99.0334	98.74356	98.09802
3743	97.8679	98.3748	99.05058	98.73982	98.08568
3742	97.87131	98.37995	99.05316	98.74162	98.08096
3741	97.8737	98.38497	99.04862	98.745	98.08384
3740	97.87163	98.38348	99.04389	98.74415	98.08002
3739	97.85882	98.37213	99.03546	98.73707	98.06072
3738	97.83611	98.35669	99.02096	98.72795	98.0332
3737	97.81716	98.34839	99.00746	98.72574	98.01587
3736	97.82179	98.35121	99.00563	98.73676	98.02284
3735	97.8547	98.35549	99.01648	98.75576	98.04892
3734	97.89389	98.35105	99.02924	98.76899	98.07348
3733	97.91232	98.34102	99.03398	98.76755	98.0808
3732	97.90274	98.33391	99.02904	98.75193	98.06862
3731	97.87603	98.33192	99.01719	98.72817	98.04405
3730	97.84651	98.3319	99.00292	98.70352	98.01734
3729	97.82224	98.33202	98.99312	98.68441	97.99641
3728	97.80459	98.33439	98.99466	98.67655	97.98539
3727	97.79349	98.34225	99.0088	98.68288	97.98506
3726	97.79013	98.35447	99.0277	98.69929	97.99178
3725	97.79305	98.36459	99.03904	98.71522	97.99818
3724	97.79705	98.36616	99.03695	98.72182	97.99772
3723	97.79822	98.35844	99.02683	98.71883	97.98862
3722	97.79711	98.34641	99.01852	98.71269	97.97357
3721	97.79537	98.33572	99.01717	98.70952	97.95668
3720	97.79272	98.32831	99.02107	98.71018	97.94044
3719	97.78781	98.32164	99.02587	98.7111	97.92433
3718	97.78009	98.31135	99.02828	98.7087	97.90596
3717	97.77099	98.29465	99.02653	98.70209	97.88238
3716	97.76238	98.27169	99.01963	98.69235	97.85118
3715	97.75304	98.24451	99.0083	98.68051	97.81084
3714	97.73726	98.21555	98.99614	98.66688	97.76097
3713	97.71009	98.18792	98.98844	98.65295	97.70422
3712	97.67609	98.16493	98.9878	98.64158	97.64619
3711	97.64601	98.14608	98.98989	98.63264	97.58921
3710	97.62225	98.12755	98.98759	98.62253	97.53015
3709	97.59913	98.10785	98.97969	98.61028	97.46778
3708	97.575	98.08832	98.97018	98.59898	97.40652

3707	97.55406	98.06953	98.96293	98.59157	97.35135
3706	97.53986	98.05041	98.95892	98.5881	97.30221
3705	97.53054	98.02945	98.95609	98.58569	97.25375
3704	97.51911	98.00541	98.95133	98.58016	97.19984
3703	97.49939	97.97759	98.94335	98.56871	97.14021
3702	97.47232	97.94662	98.93474	98.55207	97.08199
3701	97.4439	97.9145	98.92865	98.53313	97.03169
3700	97.41701	97.88387	98.92382	98.51365	96.98834
3699	97.39095	97.85656	98.91584	98.49284	96.94753
3698	97.36571	97.83237	98.90255	98.46893	96.90776
3697	97.34281	97.81069	98.88579	98.44197	96.87229
3696	97.32432	97.79246	98.86923	98.41406	96.84685
3695	97.31121	97.77988	98.85588	98.38745	96.83546
3694	97.30311	97.7737	98.84748	98.36365	96.83723
3693	97.29971	97.772	98.84392	98.34452	96.84674
3692	97.3016	97.77199	98.84151	98.33156	96.85866
3691	97.30878	97.77266	98.83439	98.32139	96.8732
3690	97.31817	97.77529	98.82031	98.30332	96.89471
3689	97.32255	97.7798	98.80425	98.26864	96.9208
3688	97.31468	97.78414	98.79148	98.22328	96.94134
3687	97.29619	97.78773	98.78077	98.18133	96.9528
3686	97.27781	97.79064	98.7694	98.14887	96.95955
3685	97.26696	97.7907	98.75836	98.12167	96.96317
3684	97.26082	97.78471	98.74904	98.09349	96.96079
3683	97.25182	97.77167	98.73967	98.0621	96.95079
3682	97.2364	97.75499	98.72838	98.03066	96.93593
3681	97.21899	97.74022	98.71721	98.005	96.92117
3680	97.20831	97.72985	98.71148	97.98945	96.90981
3679	97.20923	97.72266	98.71364	97.98424	96.90338
3678	97.21635	97.71717	98.71197	97.98576	96.90365
3677	97.21717	97.71394	98.72178	97.9896	96.91235
3676	97.20891	97.71303	98.71704	97.99288	96.92443
3675	97.20287	97.70903	98.71134	97.99305	96.92562
3674	97.20078	97.69927	98.70645	97.99136	96.9096
3673	97.19568	97.68958	98.69836	97.99358	96.8862
3672	97.18589	97.68234	98.68728	98.00123	96.86386
3671	97.17123	97.6744	98.67605	98.01155	96.84309
3670	97.15439	97.66309	98.66726	98.0199	96.82228
3669	97.13863	97.6478	98.66133	98.01999	96.79961
3668	97.11946	97.63148	98.65517	98.01099	96.77549
3667	97.09399	97.61797	98.64848	97.99826	96.75282
3666	97.06742	97.60706	98.64452	97.9856	96.73267
3665	97.04456	97.59605	98.644	97.97276	96.7138
3664	97.02497	97.58278	98.64286	97.95693	96.69384
3663	97.00576	97.56676	98.63618	97.93572	96.67
3662	96.98621	97.54928	98.62342	97.91078	96.64091
3661	96.96882	97.53279	98.60877	97.88763	96.60833
3660	96.95473	97.51891	98.59579	97.87032	96.5763
3659	96.93947	97.50608	98.58309	97.85625	96.54796
3658	96.91571	97.48872	98.56668	97.83774	96.52261
3657	96.88312	97.46101	98.54644	97.81047	96.49652
3656	96.85233	97.4238	98.5285	97.77988	96.4666
3655	96.8326	97.38595	98.51736	97.75539	96.43469
3654	96.82327	97.35691	98.51209	97.73984	96.40561
3653	96.81723	97.34003	98.51086	97.72715	96.37966
3652	96.80202	97.33193	98.50983	97.70712	96.35032
3651	96.76543	97.32466	98.50034	97.67287	96.31155
3650	96.71262	97.30931	98.4753	97.62797	96.26668
3649	96.66844	97.28196	98.43897	97.58382	96.22472

3648	96.64539	97.24715	98.40396	97.54671	96.18727
3647	96.63073	97.21387	98.37875	97.51481	96.14952
3646	96.61181	97.19003	98.36358	97.48609	96.10984
3645	96.5881	97.17908	98.35602	97.46131	96.07109
3644	96.56477	97.17898	98.35535	97.44275	96.03707
3643	96.54544	97.18261	98.36049	97.43176	96.00951
3642	96.52919	97.18151	98.36669	97.42594	95.98702
3641	96.51184	97.17117	98.36734	97.41868	95.96579
3640	96.48997	97.15353	98.3597	97.40368	95.94194
3639	96.46424	97.13336	98.34723	97.38043	95.91343
3638	96.4381	97.11302	98.33501	97.35382	95.88053
3637	96.41329	97.09161	98.32403	97.32865	95.84507
3636	96.38839	97.06772	98.31204	97.30568	95.80863
3635	96.36274	97.04117	98.29886	97.2834	95.771
3634	96.33995	97.01266	98.28832	97.26217	95.73095
3633	96.32439	96.98305	98.28357	97.24408	95.68854
3632	96.3133	96.95309	98.28207	97.22788	95.6448
3631	96.29358	96.92301	98.27431	97.20595	95.59895
3630	96.25256	96.89397	98.249	97.17071	95.54933
3629	96.20076	96.86911	98.2094	97.12794	95.49863
3628	96.16115	96.84935	98.17446	97.0941	95.45222
3627	96.13367	96.83474	98.15275	97.07824	95.41478
3626	96.11066	96.82578	98.14178	97.07686	95.38946
3625	96.09547	96.82039	98.14024	97.08093	95.37373
3624	96.09184	96.81638	98.14567	97.08291	95.36232
3623	96.09719	96.81327	98.15305	97.0778	95.35213
3622	96.1028	96.81052	98.15714	97.06123	95.34252
3621	96.09828	96.80622	98.15399	97.03146	95.33455
3620	96.08161	96.79898	98.14288	96.99503	95.33155
3619	96.06342	96.79025	98.12799	96.96511	95.33705
3618	96.05222	96.78275	98.11373	96.94839	95.35021
3617	96.0443	96.7783	98.09952	96.93936	95.36712
3616	96.03311	96.77654	98.08281	96.92778	95.38421
3615	96.01684	96.77562	98.06418	96.90767	95.3982
3614	95.99851	96.7741	98.04815	96.88128	95.40704
3613	95.98278	96.77169	98.03889	96.8557	95.41207
3612	95.9701	96.76926	98.03485	96.83541	95.41751
3611	95.95595	96.76844	98.02962	96.8195	95.42693
3610	95.938	96.76978	98.01873	96.8051	95.44006
3609	95.92156	96.77198	98.00435	96.7921	95.4533
3608	95.91452	96.77296	97.99257	96.78239	95.46323
3607	95.91587	96.77168	97.98641	96.77524	95.46885
3606	95.91548	96.76998	97.98372	96.76745	95.47135
3605	95.90643	96.77102	97.98137	96.75711	95.4725
3604	95.8902	96.77551	97.97741	96.74407	95.47358
3603	95.87141	96.78017	97.97043	96.7276	95.47485
3602	95.85246	96.77977	97.96013	96.70549	95.47561
3601	95.83384	96.77203	97.94852	96.67713	95.47523
3600	95.8172	96.75986	97.93867	96.64661	95.47355
3599	95.80467	96.74804	97.93081	96.6207	95.46992
3598	95.79545	96.7381	97.92142	96.60331	95.46277
3597	95.78592	96.72847	97.90671	96.59325	95.45187
3596	95.77354	96.718	97.88731	96.5861	95.44076
3595	95.75952	96.70774	97.86962	96.57753	95.43497
3594	95.74751	96.69901	97.86161	96.56568	95.43621
3593	95.73991	96.69269	97.86655	96.55253	95.44132
3592	95.73694	96.68981	97.88127	96.54195	95.44664
3591	95.73679	96.69067	97.89817	96.53529	95.44986
3590	95.73397	96.6929	97.90701	96.5289	95.44906

3589	95.7217	96.69231	97.89876	96.51704	95.44442
3588	95.702	96.68723	97.87474	96.49831	95.44178
3587	95.68599	96.67961	97.84888	96.47759	95.44741
3586	95.67677	96.67183	97.83317	96.46028	95.45853
3585	95.66646	96.6652	97.82784	96.44768	95.46738
3584	95.6503	96.6601	97.82753	96.43746	95.47018
3583	95.63057	96.65615	97.82715	96.42561	95.46803
3582	95.61162	96.65238	97.82246	96.40901	95.46328
3581	95.59576	96.64705	97.81052	96.38717	95.45702
3580	95.58172	96.63823	97.79195	96.36271	95.44943
3579	95.56553	96.62606	97.77079	96.33937	95.44151
3578	95.54402	96.61357	97.75176	96.31913	95.43483
3577	95.51811	96.60481	97.73747	96.3018	95.4297
3576	95.49256	96.60162	97.72797	96.28704	95.42485
3575	95.4719	96.60188	97.72221	96.27538	95.41864
3574	95.45663	96.60071	97.71893	96.26644	95.41034
3573	95.44398	96.5939	97.71706	96.25766	95.40035
3572	95.43097	96.58064	97.71555	96.24583	95.3899
3571	95.41567	96.56386	97.71301	96.22954	95.37996
3570	95.39563	96.54875	97.70698	96.21027	95.37027
3569	95.36847	96.54068	97.69474	96.19247	95.36039
3568	95.33822	96.54205	97.67699	96.1816	95.35273
3567	95.31674	96.54807	97.66055	96.17827	95.35157
3566	95.30829	96.54865	97.65164	96.17525	95.35597
3565	95.30198	96.53954	97.64845	96.16567	95.35961
3564	95.28699	96.52535	97.64485	96.14886	95.35797
3563	95.26256	96.51245	97.63755	96.12748	95.35161
3562	95.23408	96.50386	97.62811	96.10467	95.34489
3561	95.20805	96.49918	97.62068	96.08404	95.34328
3560	95.18865	96.49613	97.6177	96.06914	95.3491
3559	95.17543	96.4921	97.61735	96.06118	95.35852
3558	95.1643	96.4852	97.61588	96.05716	95.36334
3557	95.15133	96.47476	97.61203	96.05144	95.35714
3556	95.13512	96.4615	97.60741	96.03934	95.34009
3555	95.1161	96.44743	97.60298	96.01993	95.31893
3554	95.09564	96.4357	97.59697	95.99628	95.30303
3553	95.07653	96.42944	97.58765	95.97351	95.29883
3552	95.06219	96.42925	97.5768	95.95537	95.30555
3551	95.05305	96.43196	97.56817	95.94163	95.31593
3550	95.04513	96.43303	97.56333	95.92909	95.32195
3549	95.03334	96.42996	97.56074	95.91513	95.32104
3548	95.01559	96.42417	97.55799	95.90047	95.31812
3547	94.99459	96.41943	97.55356	95.88826	95.3215
3546	94.97548	96.41753	97.54723	95.87961	95.33362
3545	94.96051	96.41575	97.53965	95.87132	95.34674
3544	94.94757	96.4103	97.53197	95.85965	95.35118
3543	94.93412	96.40085	97.52545	95.84435	95.34593
3542	94.92041	96.3903	97.52075	95.82772	95.33828
3541	94.90867	96.3814	97.51761	95.81133	95.33537
3540	94.90049	96.37486	97.51517	95.79499	95.3382
3539	94.89548	96.3701	97.51276	95.77843	95.34312
3538	94.89214	96.36695	97.51047	95.76292	95.34728
3537	94.8896	96.3659	97.50876	95.75072	95.35125
3536	94.88762	96.36614	97.50716	95.74219	95.35612
3535	94.88492	96.36492	97.50335	95.73446	95.36019
3534	94.87949	96.35988	97.49485	95.72391	95.36068
3533	94.8708	96.35217	97.4816	95.70983	95.3578
3532	94.86006	96.34561	97.46622	95.69423	95.35484
3531	94.84766	96.34263	97.45146	95.67822	95.3543

3530	94.83248	96.34138	97.43823	95.66017	95.35575
3529	94.81528	96.33784	97.4268	95.63953	95.35809
3528	94.80105	96.33031	97.4182	95.62117	95.36193
3527	94.79421	96.32117	97.41256	95.61187	95.36751
3526	94.79243	96.3142	97.40679	95.61164	95.37228
3525	94.78836	96.31163	97.39674	95.6115	95.37328
3524	94.77791	96.31294	97.38246	95.60182	95.37166
3523	94.76452	96.3152	97.3695	95.58161	95.37224
3522	94.75469	96.31509	97.36376	95.55826	95.37837
3521	94.75193	96.31179	97.36596	95.53915	95.38881
3520	94.75545	96.30748	97.37168	95.52582	95.3993
3519	94.76164	96.30435	97.3753	95.51523	95.4052
3518	94.7653	96.30182	97.37354	95.50389	95.40371
3517	94.7621	96.29737	97.3665	95.49037	95.3961
3516	94.75166	96.28937	97.35632	95.47479	95.38749
3515	94.7376	96.27827	97.34494	95.45751	95.38228
3514	94.72388	96.26553	97.33307	95.43894	95.37931
3513	94.7118	96.2532	97.32092	95.42033	95.37344
3512	94.70096	96.2438	97.30925	95.40359	95.36231
3511	94.69189	96.23865	97.2988	95.3897	95.35023
3510	94.68572	96.23538	97.28884	95.37725	95.34385
3509	94.6811	96.2292	97.27739	95.36362	95.34487
3508	94.67363	96.21757	97.26346	95.34756	95.34873
3507	94.65975	96.20275	97.24864	95.32993	95.34988
3506	94.6405	96.18909	97.23644	95.31228	95.34621
3505	94.62123	96.17961	97.23056	95.29611	95.33938
3504	94.60842	96.17568	97.2331	95.28343	95.3331
3503	94.60541	96.17772	97.24323	95.27633	95.33091
3502	94.60966	96.18454	97.25669	95.27456	95.33384
3501	94.61412	96.19182	97.2668	95.27412	95.33925
3500	94.61154	96.19335	97.26702	95.26894	95.3423
3499	94.59828	96.1848	97.25424	95.25454	95.33895
3498	94.57637	96.16763	97.23153	95.23145	95.32931
3497	94.55282	96.14887	97.20738	95.20537	95.31824
3496	94.53502	96.13569	97.19032	95.18307	95.31132
3495	94.5252	96.1296	97.18311	95.16725	95.30944
3494	94.52002	96.1268	97.18234	95.15555	95.30847
3493	94.5154	96.12305	97.18298	95.14405	95.30413
3492	94.50997	96.11629	97.18153	95.13018	95.29545
3491	94.50362	96.1053	97.17578	95.11276	95.28365
3490	94.49535	96.08931	97.16515	95.0917	95.27034
3489	94.48414	96.07062	97.15289	95.0692	95.25815
3488	94.47115	96.05539	97.14565	95.04983	95.25049
3487	94.45933	96.04873	97.14782	95.03713	95.24844
3486	94.45062	96.04965	97.15673	95.03015	95.24902
3485	94.44475	96.05278	97.16483	95.02442	95.24852
3484	94.43983	96.0537	97.16591	95.01552	95.24608
3483	94.43355	96.05146	97.15837	95.0014	95.24275
3482	94.42486	96.04687	97.14446	94.98289	95.23846
3481	94.41526	96.04045	97.12798	94.9632	95.23264
3480	94.40729	96.03194	97.11219	94.94636	95.22683
3479	94.40137	96.02072	97.09824	94.93469	95.22329
3478	94.39532	96.00688	97.08535	94.92745	95.22102
3477	94.38732	95.99262	97.07289	94.92206	95.21563
3476	94.37778	95.98155	97.06174	94.91572	95.20384
3475	94.36765	95.97491	97.05313	94.90589	95.18705
3474	94.35681	95.96999	97.04713	94.89143	95.17036
3473	94.34603	95.96397	97.04363	94.87486	95.1592
3472	94.33862	95.95805	97.04353	94.86204	95.15654

3471	94.33708	95.9551	97.04678	94.85673	95.16099
3470	94.33904	95.95442	97.04987	94.85595	95.16722
3469	94.339	95.95195	97.04783	94.8525	95.16948
3468	94.33375	95.94564	97.0395	94.84225	95.1654
3467	94.32395	95.93757	97.02923	94.82717	95.15586
3466	94.31107	95.93003	97.02231	94.81132	95.14243
3465	94.2958	95.9227	97.02001	94.79619	95.12707
3464	94.27991	95.91471	97.01935	94.78093	95.11345
3463	94.26668	95.90722	97.0163	94.76526	95.10547
3462	94.2578	95.90202	97.00872	94.75058	95.10342
3461	94.25149	95.8988	96.99748	94.73858	95.10311
3460	94.24477	95.89515	96.98582	94.72926	95.09995
3459	94.23664	95.88877	96.97719	94.72062	95.09275
3458	94.22796	95.879	96.97291	94.7103	95.08358
3457	94.21906	95.8671	96.97158	94.69785	95.07531
3456	94.20834	95.85573	96.97031	94.68497	95.06961
3455	94.19359	95.84748	96.96634	94.67316	95.06604
3454	94.17529	95.84314	96.95852	94.66232	95.06269
3453	94.15812	95.84154	96.9483	94.65223	95.05825
3452	94.14765	95.84042	96.93874	94.64383	95.05288
3451	94.14401	95.83703	96.9313	94.63714	95.04671
3450	94.14055	95.82862	96.92403	94.62899	95.03844
3449	94.1307	95.81439	96.9142	94.61561	95.02738
3448	94.11543	95.79763	96.9026	94.59777	95.01612
3447	94.10152	95.78427	96.89386	94.5811	95.00887
3446	94.09222	95.7777	96.89126	94.57032	95.00652
3445	94.08399	95.77623	96.89294	94.56507	95.00571
3444	94.07299	95.7756	96.89407	94.56199	95.00273
3443	94.06075	95.77312	96.89189	94.55841	94.99678
3442	94.05161	95.76931	96.88831	94.55338	94.98996
3441	94.04671	95.76654	96.88795	94.54684	94.98549
3440	94.04202	95.76565	96.89314	94.539	94.9853
3439	94.03164	95.76358	96.90039	94.52992	94.98733
3438	94.01282	95.75518	96.90255	94.51961	94.98595
3437	93.9888	95.73913	96.89567	94.50928	94.97737
3436	93.96703	95.72113	96.88351	94.50186	94.96475
3435	93.953	95.70934	96.87391	94.49917	94.95589
3434	93.94527	95.70654	96.87122	94.49829	94.95524
3433	93.93746	95.70839	96.87337	94.4932	94.96023
3432	93.92544	95.70914	96.87599	94.48138	94.96518
3431	93.91091	95.707	96.87713	94.46723	94.96649
3430	93.8977	95.70307	96.87723	94.45739	94.9632
3429	93.88638	95.69788	96.87627	94.45369	94.95513
3428	93.87404	95.69094	96.87257	94.45241	94.94305
3427	93.85843	95.68266	96.86472	94.44994	94.92961
3426	93.841	95.6745	96.85385	94.44704	94.91845
3425	93.82575	95.66759	96.84368	94.44697	94.91183
3424	93.81544	95.66226	96.83778	94.45033	94.90947
3423	93.80835	95.6586	96.83619	94.45282	94.90907
3422	93.7991	95.65655	96.83548	94.44881	94.90804
3421	93.78375	95.65556	96.83288	94.43762	94.90595
3420	93.76432	95.6549	96.82997	94.42548	94.90545
3419	93.74687	95.65437	96.83065	94.41971	94.90968
3418	93.73477	95.65399	96.83568	94.42097	94.91819
3417	93.72513	95.65339	96.84118	94.42279	94.92651
3416	93.7124	95.65218	96.84299	94.41883	94.92989
3415	93.69471	95.6508	96.84137	94.40965	94.9275
3414	93.67605	95.65033	96.84027	94.40183	94.92293
3413	93.6622	95.65126	96.84246	94.40092	94.92091

3412	93.65513	95.65239	96.84626	94.40637	94.92337
3411	93.6516	95.65134	96.8474	94.41292	94.92784
3410	93.647	95.64655	96.84358	94.41547	94.92965
3409	93.63941	95.63889	96.83704	94.41233	94.92629
3408	93.62998	95.63113	96.83253	94.40494	94.91953
3407	93.62029	95.62534	96.833	94.39598	94.91308
3406	93.61131	95.62137	96.83721	94.38827	94.90894
3405	93.60432	95.61809	96.84109	94.38434	94.90682
3404	93.60072	95.61529	96.8409	94.38562	94.90597
3403	93.59955	95.6137	96.83569	94.39144	94.90631
3402	93.597	95.61357	96.82777	94.39905	94.90794
3401	93.5899	95.61438	96.82117	94.4052	94.91068
3400	93.57896	95.61546	96.81878	94.40773	94.914
3399	93.56762	95.61574	96.82006	94.40621	94.91665
3398	93.55879	95.61366	96.82221	94.40221	94.9172
3397	93.55406	95.60869	96.82371	94.3989	94.91581
3396	93.55447	95.60275	96.82564	94.39923	94.9145
3395	93.56026	95.59855	96.82883	94.40367	94.91452
3394	93.57	95.5966	96.83142	94.40998	94.91472
3393	93.58171	95.59525	96.83104	94.41564	94.91384
3392	93.59436	95.59374	96.82876	94.41977	94.9132
3391	93.60715	95.59359	96.82876	94.42269	94.91526
3390	93.61816	95.59629	96.83401	94.42501	94.92015
3389	93.62567	95.60115	96.84373	94.42839	94.92571
3388	93.63025	95.60627	96.85494	94.43571	94.93059
3387	93.63387	95.61074	96.8649	94.44856	94.93527
3386	93.6375	95.61495	96.87177	94.46434	94.94023
3385	93.64108	95.61911	96.87452	94.47743	94.94468
3384	93.6454	95.62205	96.8733	94.48365	94.9473
3383	93.65187	95.62167	96.86972	94.48317	94.94736
3382	93.66063	95.61672	96.86625	94.47959	94.94558
3381	93.67078	95.60847	96.86521	94.47729	94.94477
3380	93.68216	95.60068	96.86772	94.47928	94.94855
3379	93.69487	95.59726	96.87303	94.48573	94.95767
3378	93.70716	95.59956	96.87898	94.49406	94.96822
3377	93.71588	95.60593	96.88361	94.501	94.97503
3376	93.71967	95.61303	96.88593	94.50473	94.97608
3375	93.71995	95.61742	96.88514	94.50524	94.97247
3374	93.71901	95.61723	96.88043	94.50389	94.96581
3373	93.719	95.61375	96.87308	94.50388	94.95838
3372	93.72271	95.61124	96.86789	94.50973	94.95478
3371	93.73249	95.6134	96.87003	94.52387	94.95971
3370	93.74723	95.61998	96.88006	94.54323	94.97328
3369	93.76229	95.62761	96.89292	94.56088	94.99022
3368	93.77387	95.63343	96.90254	94.57215	95.00429
3367	93.78223	95.637	96.90676	94.57848	95.0123
3366	93.78972	95.639	96.90804	94.5849	95.01462
3365	93.7972	95.63966	96.91062	94.59454	95.01401
3364	93.8037	95.63914	96.91739	94.60613	95.01391
3363	93.8084	95.63807	96.92789	94.61626	95.01608
3362	93.81138	95.6373	96.93828	94.62289	95.01926
3361	93.81312	95.63742	96.94401	94.62684	95.02146
3360	93.81453	95.63885	96.94358	94.63065	95.02327
3359	93.81727	95.64178	96.94002	94.63662	95.02743
3358	93.82281	95.64574	96.93837	94.64604	95.035
3357	93.83104	95.64951	96.94158	94.6591	95.04379
3356	93.84005	95.6515	96.94866	94.67449	95.05065
3355	93.84783	95.6508	96.95629	94.68932	95.05441
3354	93.85395	95.64843	96.96197	94.70089	95.05663

3353	93.85977	95.64752	96.96576	94.70895	95.06049
3352	93.86671	95.65078	96.96926	94.71549	95.06849
3351	93.87454	95.65727	96.97365	94.72233	95.08002
3350	93.88199	95.66342	96.97923	94.7302	95.09188
3349	93.8891	95.66778	96.98595	94.74002	95.10192
3348	93.89788	95.67315	96.99301	94.75271	95.11091
3347	93.90983	95.68212	96.99782	94.76684	95.11959
3346	93.92381	95.6926	96.99774	94.77878	95.12628
3345	93.93723	95.70019	96.99415	94.78728	95.12978
3344	93.94865	95.7041	96.9934	94.79621	95.13303
3343	93.95806	95.70797	97.00145	94.81056	95.14045
3342	93.96557	95.71462	97.01777	94.83042	95.15202
3341	93.97131	95.72276	97.03558	94.85089	95.16286
3340	93.97603	95.72916	97.04776	94.86697	95.16878
3339	93.98032	95.7317	97.05145	94.87681	95.16965
3338	93.98368	95.7298	97.04823	94.88099	95.1676
3337	93.98593	95.7242	97.04244	94.88176	95.16495
3336	93.98901	95.71791	97.03944	94.88309	95.16453
3335	93.99544	95.71558	97.04312	94.88899	95.16911
3334	94.00475	95.72003	97.05327	94.9005	95.1788
3333	94.01324	95.72949	97.06609	94.91515	95.19043
3332	94.01781	95.73928	97.0774	94.92985	95.20022
3331	94.01873	95.74578	97.08529	94.9432	95.20661
3330	94.01861	95.74857	97.09005	94.95537	95.21055
3329	94.01986	95.74919	97.09297	94.96695	95.21413
3328	94.02375	95.74912	97.09556	94.97817	95.21883
3327	94.03064	95.74924	97.09892	94.98864	95.22423
3326	94.04016	95.75088	97.10331	94.998	95.22906
3325	94.05126	95.75626	97.10872	95.00721	95.23392
3324	94.06208	95.76666	97.1154	95.01796	95.24127
3323	94.06983	95.77997	97.12296	95.02954	95.25126
3322	94.07203	95.79113	97.12937	95.03781	95.25953
3321	94.06925	95.79616	97.13236	95.03953	95.26206
3320	94.06586	95.79534	97.13212	95.03724	95.26067
3319	94.06658	95.79217	97.1316	95.03761	95.26092
3318	94.07238	95.79	97.13342	95.0445	95.26511
3317	94.081	95.79019	97.13729	95.05594	95.27081
3316	94.09085	95.79233	97.14121	95.06802	95.27556
3315	94.10269	95.79519	97.14452	95.07986	95.27982
3314	94.11689	95.79775	97.14896	95.09367	95.28494
3313	94.13094	95.80011	97.15623	95.11112	95.29095
3312	94.14067	95.80275	97.16501	95.13075	95.2972
3311	94.14383	95.80485	97.17102	95.14826	95.30311
3310	94.14259	95.80481	97.17099	95.1594	95.3077
3309	94.14255	95.80337	97.16674	95.16359	95.3104
3308	94.14846	95.80374	97.16419	95.16478	95.3123
3307	94.15944	95.80736	97.16752	95.1677	95.31484
3306	94.16914	95.81113	97.17508	95.17374	95.31743
3305	94.17194	95.81145	97.18193	95.18159	95.31868
3304	94.16907	95.8093	97.18545	95.19075	95.31959
3303	94.16735	95.80875	97.18713	95.20212	95.32296
3302	94.17215	95.81161	97.18962	95.2151	95.32935
3301	94.18278	95.81644	97.19399	95.22676	95.33638
3300	94.19475	95.82247	97.19988	95.23533	95.34265
3299	94.20499	95.83098	97.20664	95.24284	95.34977
3298	94.21409	95.84179	97.21305	95.2528	95.35946
3297	94.22415	95.8509	97.21712	95.26587	95.37031
3296	94.23524	95.8537	97.21762	95.27926	95.37869
3295	94.24434	95.8496	97.21594	95.28998	95.38193

3294	94.24813	95.84277	97.21564	95.29799	95.38024
3293	94.24689	95.83889	97.21926	95.30595	95.37682
3292	94.24463	95.84074	97.22545	95.31611	95.37593
3291	94.24475	95.84611	97.22969	95.32724	95.37953
3290	94.24702	95.85004	97.22883	95.33505	95.3857
3289	94.2499	95.85012	97.22508	95.33633	95.39136
3288	94.25395	95.8491	97.22438	95.33267	95.39571
3287	94.26072	95.85137	97.23017	95.32906	95.39965
3286	94.2692	95.85747	97.23958	95.32915	95.40313
3285	94.27582	95.86401	97.24641	95.33293	95.40544
3284	94.27851	95.86837	97.24739	95.3389	95.40758
3283	94.2791	95.87127	97.24478	95.34691	95.41162
3282	94.28147	95.87443	97.24358	95.35812	95.41771
3281	94.28831	95.87766	97.24727	95.37294	95.42378
3280	94.29967	95.87954	97.25586	95.38979	95.42844
3279	94.31322	95.8797	97.26661	95.40561	95.43216
3278	94.32544	95.87966	97.27608	95.4176	95.43585
3277	94.33365	95.88182	97.28212	95.42517	95.4401
3276	94.33717	95.8873	97.28442	95.43026	95.44549
3275	94.33659	95.89421	97.28382	95.43551	95.45164
3274	94.33305	95.89857	97.28192	95.44191	95.45614
3273	94.32908	95.89814	97.28148	95.44895	95.45678
3272	94.32851	95.89506	97.28534	95.45622	95.45488
3271	94.33363	95.89368	97.29382	95.46394	95.45437
3270	94.34277	95.89641	97.30415	95.47206	95.45751
3269	94.35235	95.9027	97.31312	95.48012	95.4633
3268	94.36024	95.91096	97.31966	95.48807	95.46965
3267	94.36581	95.91948	97.32356	95.49606	95.47495
3266	94.36804	95.92629	97.32361	95.50319	95.47807
3265	94.3667	95.93049	97.31936	95.50775	95.47933
3264	94.36512	95.93388	97.31404	95.50977	95.48141
3263	94.36835	95.93897	97.31302	95.51208	95.48678
3262	94.3774	95.94507	97.3184	95.51796	95.49396
3261	94.38737	95.94859	97.32693	95.52785	95.49902
3260	94.39251	95.94778	97.33371	95.53882	95.50065
3259	94.39161	95.94532	97.33657	95.54727	95.50156
3258	94.38791	95.94531	97.33631	95.55212	95.50427
3257	94.38534	95.94937	97.33457	95.55567	95.50831
3256	94.38633	95.95629	97.33305	95.56161	95.51237
3255	94.39166	95.96407	97.33394	95.57201	95.51689
3254	94.40059	95.97128	97.33938	95.58564	95.52313
3253	94.41137	95.97761	97.34977	95.59931	95.53116
3252	94.42237	95.98422	97.36297	95.61042	95.53997
3251	94.43256	95.99262	97.37519	95.61828	95.54825
3250	94.44095	96.00249	97.38297	95.62336	95.55475
3249	94.4463	96.01125	97.3852	95.62642	95.55859
3248	94.44796	96.0163	97.38363	95.6285	95.56009
3247	94.44677	96.0174	97.38155	95.63137	95.56032
3246	94.44487	96.01648	97.38143	95.63722	95.56029
3245	94.44488	96.01591	97.38367	95.64735	95.56126
3244	94.44873	96.01726	97.38721	95.66102	95.56548
3243	94.45632	96.02116	97.39133	95.67602	95.57465
3242	94.46536	96.02737	97.39654	95.69036	95.58744
3241	94.47308	96.03485	97.40368	95.70309	95.59964
3240	94.4784	96.04187	97.41204	95.71337	95.60727
3239	94.48231	96.04659	97.41899	95.72004	95.60949
3238	94.48641	96.04854	97.42236	95.72327	95.60913
3237	94.49163	96.04964	97.42281	95.7258	95.61099
3236	94.49773	96.05277	97.42274	95.73079	95.61801

3235	94.50352	96.05883	97.42342	95.73846	95.62798
3234	94.50814	96.06579	97.42464	95.7465	95.63495
3233	94.51241	96.07148	97.42727	95.75406	95.63557
3232	94.51823	96.07627	97.4336	95.76335	95.63291
3231	94.52589	96.08206	97.44365	95.77661	95.63253
3230	94.53325	96.08935	97.45327	95.79279	95.63618
3229	94.53865	96.09661	97.45799	95.80833	95.64135
3228	94.54384	96.10201	97.45807	95.82008	95.64563
3227	94.55212	96.10504	97.45785	95.82703	95.64885
3226	94.56401	96.1068	97.46069	95.83071	95.65184
3225	94.57636	96.10975	97.46634	95.83473	95.65587
3224	94.58533	96.11648	97.47269	95.84248	95.66288
3223	94.58931	96.12777	97.47807	95.85398	95.67378
3222	94.58931	96.14172	97.48177	95.86592	95.68607
3221	94.58849	96.15523	97.48413	95.87553	95.69548
3220	94.5913	96.16582	97.48678	95.88363	95.70056
3219	94.60131	96.17224	97.49165	95.89306	95.70454
3218	94.61837	96.1746	97.49895	95.90522	95.71252
3217	94.63787	96.17476	97.50649	95.91892	95.72709
3216	94.65313	96.17496	97.51138	95.93139	95.74565
3215	94.65963	96.17568	97.51233	95.94014	95.76119
3214	94.6587	96.1764	97.51104	95.94566	95.76757
3213	94.65753	96.17905	97.51161	95.95286	95.76592
3212	94.66378	96.18759	97.51764	95.96721	95.76432
3211	94.67834	96.20226	97.5287	95.98789	95.76933
3210	94.69431	96.21666	97.54004	96.007	95.77954
3209	94.70418	96.224	97.54709	96.01779	95.78904
3208	94.7076	96.22546	97.55024	96.02244	95.79541
3207	94.7108	96.22882	97.55457	96.02925	95.80134
3206	94.71931	96.23934	97.56476	96.04349	95.8095
3205	94.73279	96.25419	97.58065	96.06289	95.8192
3204	94.74633	96.26611	97.59691	96.08115	95.82767
3203	94.7549	96.2701	97.6066	96.09368	95.83269
3202	94.75699	96.2669	97.60637	96.10058	95.83432
3201	94.75558	96.26195	97.59948	96.10617	95.83583
3200	94.75609	96.26166	97.59349	96.11567	95.84199
3199	94.76222	96.2689	97.59368	96.13045	95.85388
3198	94.77314	96.28104	97.59905	96.14637	95.86674
3197	94.78501	96.29319	97.60503	96.15789	95.87516
3196	94.7948	96.30289	97.60913	96.16379	95.87981
3195	94.80215	96.3113	97.61271	96.16814	95.8864
3194	94.80866	96.32051	97.61858	96.17637	95.89882
3193	94.81642	96.33121	97.6288	96.19149	95.91571
3192	94.82666	96.34225	97.64391	96.21256	95.93242
3191	94.83858	96.35118	97.66194	96.23499	95.94409
3190	94.84967	96.35566	97.67778	96.25294	95.94759
3189	94.85808	96.35569	97.68591	96.26329	95.94386
3188	94.86416	96.35412	97.68518	96.2679	95.93823
3187	94.86942	96.35413	97.68017	96.27151	95.93658
3186	94.87495	96.35708	97.67727	96.2778	95.94108
3185	94.88148	96.36326	97.67964	96.2878	95.95041
3184	94.88985	96.37321	97.68603	96.30069	95.96277
3183	94.90019	96.38632	97.69355	96.31477	95.97667
3182	94.91147	96.39967	97.70066	96.32836	95.99005
3181	94.9229	96.41027	97.70752	96.34063	96.00122
3180	94.93461	96.4177	97.71423	96.35133	96.00998
3179	94.94638	96.42348	97.71961	96.35987	96.01665
3178	94.9569	96.42868	97.7225	96.36602	96.02129
3177	94.96574	96.43393	97.72365	96.37157	96.02544

3176	94.97445	96.44022	97.72523	96.37948	96.0324
3175	94.9843	96.44782	97.72844	96.39063	96.04347
3174	94.9943	96.45545	97.73316	96.40334	96.05591
3173	95.00342	96.46257	97.74006	96.41681	96.06701
3172	95.0134	96.47136	97.75099	96.43254	96.07787
3171	95.02731	96.484	97.76616	96.45117	96.09035
3170	95.04537	96.49899	97.7822	96.47016	96.10251
3169	95.06397	96.51212	97.79447	96.48658	96.11096
3168	95.07864	96.52057	97.80078	96.50012	96.11592
3167	95.08732	96.52429	97.80203	96.51166	96.12056
3166	95.09137	96.52449	97.80063	96.52121	96.12643
3165	95.09433	96.52313	97.79951	96.52924	96.13289
3164	95.09896	96.52312	97.80099	96.53759	96.13978
3163	95.10435	96.52632	97.80495	96.54683	96.14696
3162	95.10765	96.53194	97.80896	96.55495	96.15292
3161	95.10932	96.53856	97.81196	96.56187	96.15762
3160	95.11474	96.5469	97.81683	96.57255	96.16537
3159	95.1284	96.55814	97.82696	96.59139	96.1805
3158	95.14811	96.57057	97.84055	96.6148	96.20049
3157	95.16701	96.5807	97.85099	96.63343	96.21737
3156	95.18046	96.5874	97.85325	96.64189	96.22601
3155	95.18876	96.59224	97.84873	96.64287	96.22797
3154	95.19434	96.59609	97.84349	96.64217	96.22788
3153	95.19913	96.59829	97.8429	96.64349	96.22956
3152	95.2045	96.59924	97.8483	96.64845	96.23526
3151	95.21125	96.60108	97.85719	96.65796	96.24443
3150	95.21923	96.60531	97.86613	96.67144	96.25303
3149	95.22818	96.6116	97.87361	96.68649	96.25729
3148	95.23837	96.61919	97.88026	96.70067	96.25853
3147	95.24952	96.62773	97.88664	96.71295	96.26143
3146	95.26	96.63657	97.89176	96.72342	96.26796
3145	95.2688	96.64525	97.89494	96.73319	96.27591
3144	95.27719	96.65447	97.89795	96.74442	96.28309
3143	95.28664	96.66484	97.90358	96.7584	96.28968
3142	95.29613	96.67501	97.91219	96.77339	96.29627
3141	95.30383	96.68305	97.92112	96.78602	96.30292
3140	95.31086	96.68964	97.92771	96.79527	96.31062
3139	95.32075	96.69738	97.93196	96.80371	96.32092
3138	95.33514	96.70696	97.936	96.81448	96.33361
3137	95.35163	96.71607	97.94158	96.82798	96.34696
3136	95.36601	96.72236	97.94823	96.84142	96.35988
3135	95.37545	96.72585	97.95358	96.85086	96.37182
3134	95.38012	96.72838	97.95588	96.85429	96.38115
3133	95.38317	96.73234	97.95632	96.85411	96.38658
3132	95.38844	96.73959	97.95802	96.85601	96.38954
3131	95.39673	96.74979	97.96246	96.86405	96.39272
3130	95.40492	96.75992	97.96818	96.87738	96.39684
3129	95.41027	96.76714	97.97353	96.89238	96.40148
3128	95.41433	96.77189	97.97929	96.90661	96.40758
3127	95.42109	96.77686	97.98692	96.91938	96.41602
3126	95.43166	96.78316	97.9956	96.92998	96.42458
3125	95.44299	96.78945	98.00274	96.9377	96.43004
3124	95.45143	96.79434	98.00707	96.94344	96.43281
3123	95.45616	96.79761	98.00959	96.94929	96.43638
3122	95.45925	96.79933	98.01165	96.95644	96.44242
3121	95.46389	96.79987	98.01356	96.9644	96.4497
3120	95.47221	96.80088	98.01518	96.97214	96.45743
3119	95.48366	96.80437	98.01691	96.97893	96.46621
3118	95.49577	96.81088	98.01989	96.98519	96.47568

3117	95.50726	96.81986	98.02542	96.99334	96.48455
3116	95.51925	96.8312	98.03375	97.00644	96.49287
3115	95.53211	96.84432	98.04295	97.0239	96.50133
3114	95.5428	96.85638	98.04997	97.03993	96.50861
3113	95.54763	96.86387	98.05347	97.04856	96.51255
3112	95.5469	96.86615	98.05481	97.04982	96.51401
3111	95.54501	96.86546	98.05594	97.04919	96.51649
3110	95.54643	96.8639	98.05758	97.0518	96.52178
3109	95.55291	96.86241	98.06013	97.05876	96.52851
3108	95.56367	96.86246	98.06451	97.06821	96.53495
3107	95.57647	96.86621	98.07066	97.07786	96.54088
3106	95.58874	96.8742	98.07643	97.08637	96.54684
3105	95.59903	96.88439	98.0799	97.09387	96.55369
3104	95.60709	96.8938	98.08176	97.10127	96.56234
3103	95.61258	96.90011	98.08387	97.10848	96.57161
3102	95.61515	96.90244	98.08646	97.11429	96.57781
3101	95.61675	96.90257	98.08864	97.11876	96.57934
3100	95.6214	96.90492	98.09103	97.12424	96.5805
3099	95.63071	96.91271	98.09545	97.13252	96.58719
3098	95.64152	96.92406	98.10222	97.14265	96.59966
3097	95.6502	96.93397	98.10964	97.15318	96.613
3096	95.65755	96.94023	98.1163	97.165	96.62377
3095	95.66707	96.94502	98.1221	97.17905	96.63218
3094	95.67943	96.9505	98.12718	97.19268	96.63811
3093	95.69201	96.95544	98.13108	97.20126	96.63993
3092	95.70302	96.9578	98.13365	97.20346	96.63835
3091	95.71352	96.95862	98.13585	97.20289	96.63778
3090	95.72519	96.96148	98.13935	97.20472	96.64234
3089	95.73797	96.96855	98.14558	97.21197	96.65243
3088	95.74973	96.97789	98.15437	97.22405	96.66544
3087	95.75722	96.98461	98.16292	97.23709	96.6777
3086	95.75825	96.98505	98.16734	97.24647	96.68568
3085	95.75456	96.98045	98.16674	97.25117	96.68808
3084	95.75153	96.97625	98.16486	97.25495	96.68715
3083	95.75323	96.97699	98.16609	97.26153	96.68627
3082	95.75872	96.98234	98.17036	97.26981	96.68652
3081	95.7646	96.98892	98.17363	97.27598	96.68755
3080	95.76992	96.99518	98.17344	97.27927	96.69042
3079	95.77633	97.00255	98.17201	97.28268	96.69664
3078	95.78494	97.01245	98.17373	97.28851	96.70506
3077	95.7955	97.02413	98.18062	97.29614	96.71283
3076	95.80764	97.03534	98.19029	97.30425	96.71894
3075	95.82043	97.04364	98.19756	97.31255	96.72405
3074	95.83159	97.04735	98.1984	97.32083	96.72809
3073	95.83954	97.04706	98.19368	97.32862	96.73116
3072	95.84553	97.04627	98.18898	97.33626	96.73594
3071	95.85151	97.04892	98.18965	97.34449	96.74497
3070	95.85667	97.05598	98.19614	97.35287	96.75573
3069	95.85888	97.06529	98.20477	97.36002	96.76238
3068	95.85885	97.07435	98.21219	97.36561	96.76285
3067	95.86022	97.0819	98.21773	97.37042	96.76114
3066	95.86513	97.08713	98.22204	97.37439	96.762
3065	95.872	97.08934	98.22526	97.3764	96.7664
3064	95.87818	97.08884	98.22701	97.37621	96.77272
3063	95.88297	97.08709	98.22739	97.37544	96.77924
3062	95.88793	97.08541	98.22728	97.37637	96.78456
3061	95.89505	97.08453	98.22813	97.38072	96.78824
3060	95.90481	97.08536	98.23087	97.38894	96.79183
3059	95.9154	97.08951	98.2349	97.39992	96.79756

3058	95.92461	97.09858	98.23869	97.4117	96.80595
3057	95.93292	97.11267	98.24203	97.42357	96.81609
3056	95.94292	97.12887	98.24701	97.4365	96.82746
3055	95.95494	97.14184	98.25569	97.4505	96.83892
3054	95.96573	97.14766	98.26762	97.46279	96.84741
3053	95.97302	97.14779	98.28003	97.47022	96.85085
3052	95.97884	97.14745	98.28974	97.47244	96.85163
3051	95.986	97.14941	98.29433	97.47158	96.85442
3050	95.99363	97.15167	98.29309	97.46999	96.86081
3049	95.99909	97.15221	98.28797	97.46985	96.86888
3048	96.00222	97.15316	98.28253	97.47333	96.87706
3047	96.00481	97.15748	98.27879	97.48071	96.88478
3046	96.00722	97.16424	98.27619	97.48938	96.8901
3045	96.00917	97.17041	98.2746	97.49668	96.89091
3044	96.01239	97.17564	98.27618	97.50285	96.88872
3043	96.01885	97.1816	98.28236	97.50931	96.88772
3042	96.02713	97.18786	98.29053	97.51518	96.88968
3041	96.03363	97.19209	98.2961	97.51816	96.89292
3040	96.03719	97.19422	98.2976	97.51822	96.8961
3039	96.03971	97.19677	98.29754	97.51809	96.89992
3038	96.04306	97.20069	98.29888	97.52053	96.90455
3037	96.04783	97.20381	98.3023	97.52661	96.90901
3036	96.05449	97.20416	98.30663	97.53569	96.91325
3035	96.06271	97.20267	98.31	97.5451	96.91806
3034	96.07011	97.20198	98.31062	97.55102	96.92247
3033	96.07445	97.20429	98.30839	97.55224	96.92433
3032	96.07681	97.21043	98.30574	97.55239	96.92372
3031	96.07989	97.21915	98.30553	97.55603	96.9231
3030	96.08395	97.22729	98.30821	97.56339	96.92388
3029	96.08729	97.23225	98.31226	97.57115	96.92583
3028	96.0899	97.2344	98.31668	97.57751	96.92958
3027	96.09367	97.23562	98.32139	97.5834	96.93648
3026	96.09922	97.23648	98.32594	97.58956	96.9456
3025	96.10557	97.23652	98.32961	97.59526	96.95371
3024	96.11234	97.23651	98.33259	97.59998	96.95891
3023	96.11955	97.23795	98.33538	97.60386	96.96183
3022	96.1258	97.24083	98.33725	97.60646	96.96343
3021	96.12978	97.24421	98.33721	97.60738	96.96425
3020	96.13334	97.24879	98.33629	97.60822	96.96594
3019	96.13992	97.25646	98.33735	97.61192	96.97048
3018	96.15002	97.26689	98.34211	97.61984	96.97768
3017	96.16079	97.27632	98.34964	97.63053	96.98561
3016	96.16958	97.2805	98.35746	97.64091	96.9931
3015	96.17529	97.27789	98.36279	97.6475	96.99949
3014	96.17725	97.27068	98.36344	97.64805	97.00288
3013	96.17634	97.26425	98.35945	97.64404	97.00197
3012	96.17675	97.26431	98.35421	97.64066	96.9993
3011	96.18254	97.27229	98.35228	97.64213	96.99923
3010	96.19231	97.28369	98.35564	97.64788	97.00257
3009	96.20048	97.29262	98.3625	97.65498	97.00647
3008	96.20426	97.29701	98.36953	97.66235	97.00901
3007	96.20604	97.29812	98.37398	97.66978	97.01062
3006	96.20884	97.29674	98.37435	97.67473	97.01094
3005	96.21253	97.29307	98.37086	97.67419	97.00824
3004	96.21583	97.28939	98.3659	97.66969	97.00275
3003	96.21902	97.28917	98.36272	97.66699	96.99783
3002	96.22322	97.29296	98.36314	97.67005	96.99635
3001	96.22877	97.2977	98.36666	97.67786	96.99804
3000	96.23486	97.30055	98.37155	97.68693	97.00067

2999	96.23942	97.30155	98.37619	97.69444	97.00209
2998	96.23968	97.30208	98.3799	97.6988	97.00098
2997	96.23497	97.30288	98.38326	97.70003	96.99777
2996	96.22847	97.30348	98.38712	97.70028	96.99453
2995	96.22365	97.30226	98.39042	97.70174	96.99186
2994	96.21947	97.29712	98.38997	97.70338	96.98664
2993	96.2123	97.2879	98.38385	97.70201	96.97535
2992	96.20252	97.27815	98.37447	97.69684	96.95908
2991	96.19541	97.2723	98.36696	97.6911	96.94266
2990	96.1946	97.27118	98.36465	97.68853	96.92931
2989	96.19755	97.27172	98.36703	97.69005	96.91895
2988	96.19888	97.27053	98.37111	97.69393	96.9109
2987	96.19571	97.26597	98.37356	97.69754	96.90505
2986	96.18872	97.25782	98.3724	97.69896	96.90055
2985	96.18071	97.24761	98.36833	97.69856	96.89655
2984	96.17585	97.23945	98.36477	97.69932	96.8947
2983	96.17813	97.23775	98.365	97.70399	96.89765
2982	96.18832	97.24299	98.36942	97.71144	96.90485
2981	96.20288	97.25113	98.37611	97.71759	96.91245
2980	96.21651	97.25753	98.38306	97.71974	96.91781
2979	96.22533	97.2602	98.38835	97.71889	96.92148
2978	96.22786	97.25956	98.38934	97.71761	96.92441
2977	96.22527	97.2571	98.3844	97.71738	96.92606
2976	96.22137	97.25482	98.37587	97.7185	96.92629
2975	96.22074	97.25472	98.36937	97.72129	96.92696
2974	96.22544	97.25798	98.36906	97.72682	96.93037
2973	96.23387	97.2647	98.37476	97.73637	96.93736
2972	96.24298	97.27363	98.38357	97.7497	96.94732
2971	96.25066	97.28166	98.3929	97.76346	96.95875
2970	96.25659	97.28512	98.40156	97.77304	96.96974
2969	96.26235	97.28374	98.40928	97.77742	96.97928
2968	96.27074	97.28224	98.41675	97.7808	96.98807
2967	96.28329	97.28609	98.42516	97.78786	96.99725
2966	96.29784	97.296	98.43487	97.79833	97.00672
2965	96.31028	97.30826	98.44461	97.80828	97.01561
2964	96.31854	97.31913	98.45241	97.81522	97.02293
2963	96.32377	97.32679	98.45722	97.81967	97.02687
2962	96.32774	97.33009	98.4594	97.82266	97.02539
2961	96.33075	97.32847	98.45977	97.82417	97.01963
2960	96.33235	97.3235	98.45845	97.82397	97.01463
2959	96.33294	97.31831	98.45503	97.82238	97.01464
2958	96.33418	97.31534	98.45018	97.82071	97.01908
2957	96.33885	97.31566	98.44677	97.82202	97.02551
2956	96.34923	97.31952	98.44808	97.8297	97.03368
2955	96.36424	97.32546	98.45452	97.84294	97.04384
2954	96.37864	97.3298	98.46299	97.85519	97.05301
2953	96.38723	97.32973	98.47006	97.86033	97.05758
2952	96.38984	97.32692	98.47511	97.85962	97.05861
2951	96.39088	97.32634	98.47991	97.86012	97.06081
2950	96.39428	97.33114	98.4859	97.86664	97.0664
2949	96.40046	97.34004	98.49269	97.87789	97.07317
2948	96.40751	97.34904	98.49867	97.88986	97.07825
2947	96.41337	97.35414	98.50228	97.89975	97.08099
2946	96.41677	97.35335	98.50338	97.90663	97.08248
2945	96.41808	97.34832	98.50354	97.91075	97.0846
2944	96.4195	97.34376	98.50469	97.91318	97.08893
2943	96.4232	97.34339	98.50695	97.91429	97.09452
2942	96.42916	97.34655	98.50896	97.91304	97.09761
2941	96.43598	97.3498	98.51045	97.90948	97.09606

2940	96.4433	97.35118	98.51308	97.90741	97.09255
2939	96.45198	97.35161	98.51837	97.91194	97.09138
2938	96.4622	97.35314	98.52606	97.92408	97.0936
2937	96.47314	97.35743	98.53519	97.9397	97.098
2936	96.48411	97.3647	98.54517	97.95359	97.10469
2935	96.49495	97.37271	98.5549	97.96304	97.11445
2934	96.50558	97.37816	98.56263	97.96827	97.12638
2933	96.51633	97.3809	98.56794	97.97186	97.13928
2932	96.52784	97.38494	98.57244	97.9776	97.15377
2931	96.53959	97.39288	98.57737	97.98768	97.16963
2930	96.54967	97.40147	98.58204	98.00086	97.18351
2929	96.55711	97.40539	98.58559	98.01435	97.19278
2928	96.56328	97.40389	98.58875	98.02662	97.19917
2927	96.56917	97.40066	98.59197	98.03655	97.2046
2926	96.57313	97.39861	98.59375	98.04148	97.2062
2925	96.57352	97.39809	98.5926	98.03938	97.20069
2924	96.57222	97.39919	98.58997	98.03253	97.19202
2923	96.57287	97.40259	98.58926	98.02653	97.18873
2922	96.57707	97.40843	98.59267	98.02538	97.19437
2921	96.58436	97.4168	98.60001	98.0292	97.20507
2920	96.59446	97.42822	98.60941	98.03575	97.21597
2919	96.60664	97.44126	98.61755	98.04212	97.22512
2918	96.61784	97.4516	98.62058	98.04576	97.23191
2917	96.62463	97.45656	98.61703	98.04623	97.23633
2916	96.62709	97.45945	98.6096	98.04596	97.24038
2915	96.62858	97.46618	98.60281	98.04756	97.24642
2914	96.63187	97.47835	98.59933	98.05096	97.25365
2913	96.63735	97.49243	98.5988	98.05456	97.25909
2912	96.64432	97.50458	98.59956	98.05803	97.26184
2911	96.65183	97.51277	98.60025	98.062	97.2638
2910	96.65839	97.5154	98.60062	98.06597	97.26653
2909	96.66283	97.51221	98.60142	98.06869	97.27015
2908	96.6655	97.50673	98.60306	98.06972	97.27458
2907	96.66735	97.50442	98.60444	98.06916	97.27918
2906	96.66858	97.50738	98.60433	98.06687	97.28207
2905	96.66955	97.5133	98.6038	98.06386	97.28216
2904	96.67219	97.51951	98.60513	98.06305	97.28101
2903	96.6784	97.52546	98.60807	98.06617	97.28071
2902	96.68756	97.53113	98.60987	98.07096	97.28147
2901	96.69728	97.53635	98.60999	98.07405	97.28354
2900	96.70611	97.5418	98.61188	98.07544	97.28855
2899	96.71365	97.5489	98.61791	98.07773	97.29598
2898	96.71929	97.55742	98.62499	98.08147	97.30099
2897	96.72242	97.56506	98.62771	98.08415	97.29991
2896	96.72381	97.56992	98.62476	98.08373	97.29599
2895	96.72514	97.57196	98.61981	98.08082	97.29523
2894	96.72757	97.57215	98.61715	98.07761	97.29848
2893	96.73164	97.57166	98.6185	98.07641	97.30183
2892	96.7374	97.57161	98.62278	98.07847	97.30298
2891	96.74302	97.57216	98.62709	98.08233	97.30232
2890	96.74499	97.57193	98.62834	98.08414	97.299
2889	96.74151	97.56972	98.62577	98.08185	97.29125
2888	96.73489	97.56599	98.62147	98.07814	97.2803
2887	96.72865	97.56156	98.6175	98.07694	97.26947
2886	96.72363	97.55617	98.61384	98.07786	97.25959
2885	96.71877	97.55013	98.60994	98.07695	97.24909
2884	96.71416	97.54544	98.60644	98.07246	97.23806
2883	96.71093	97.54318	98.60383	98.06712	97.22808
2882	96.70919	97.5413	98.60133	98.06487	97.21863

2881	96.70848	97.53783	98.5988	98.0675	97.20787
2880	96.70928	97.53492	98.59824	98.07415	97.19695
2879	96.71191	97.53661	98.60123	98.08204	97.18991
2878	96.71496	97.54347	98.6068	98.08776	97.18911
2877	96.71697	97.55215	98.61349	98.08996	97.19379
2876	96.71881	97.55937	98.62171	98.09073	97.20219
2875	96.72223	97.56369	98.63163	98.09267	97.21161
2874	96.72725	97.56469	98.6406	98.09568	97.21768
2873	96.73329	97.56381	98.64564	98.09889	97.21827
2872	96.74133	97.56539	98.64732	98.104	97.21741
2871	96.75186	97.57275	98.64818	98.11349	97.22117
2870	96.76151	97.58317	98.64847	98.12563	97.22972
2869	96.76522	97.58961	98.64654	98.13487	97.23783
2868	96.76181	97.58816	98.64252	98.13781	97.2427
2867	96.75524	97.58126	98.63878	98.13628	97.2468
2866	96.75073	97.57442	98.6372	98.13455	97.25279
2865	96.75185	97.57265	98.63847	98.13588	97.2605
2864	96.76036	97.57923	98.64358	98.14213	97.26961
2863	96.77543	97.5938	98.65299	98.15336	97.28084
2862	96.79278	97.61082	98.66448	98.16669	97.29326
2861	96.80747	97.62332	98.67466	98.17784	97.30426
2860	96.81815	97.62916	98.68228	98.18496	97.31324
2859	96.82684	97.63112	98.68797	98.18968	97.32206
2858	96.83532	97.63164	98.69182	98.19437	97.33159
2857	96.84437	97.63101	98.69399	98.20019	97.34129
2856	96.85552	97.63072	98.69686	98.20769	97.35207
2855	96.87018	97.63428	98.70294	98.21697	97.36594
2854	96.88681	97.6435	98.71096	98.22666	97.38241
2853	96.90162	97.65665	98.71716	98.23445	97.39868
2852	96.91274	97.67118	98.72061	98.23915	97.41356
2851	96.92133	97.68538	98.72374	98.24111	97.42756
2850	96.92791	97.69655	98.72719	98.24075	97.43906
2849	96.93021	97.70094	98.72784	98.23825	97.44416
2848	96.92591	97.69792	98.72326	98.2347	97.44173
2847	96.91649	97.69235	98.71559	98.23189	97.43579
2846	96.90738	97.69125	98.7091	98.23089	97.43206
2845	96.9046	97.69836	98.70585	98.23208	97.43426
2844	96.911	97.71251	98.70532	98.23632	97.44358
2843	96.92497	97.72966	98.70671	98.24464	97.45904
2842	96.9426	97.74574	98.71007	98.25639	97.47758
2841	96.96121	97.75885	98.7155	98.26903	97.49599
2840	96.97985	97.7694	98.72234	98.27955	97.51303
2839	96.99668	97.77824	98.72893	98.2857	97.52841
2838	97.0079	97.78506	98.73327	98.28651	97.54079
2837	97.01133	97.78964	98.73459	98.28333	97.54911
2836	97.00945	97.79357	98.73447	98.27992	97.55522
2835	97.00728	97.79892	98.73536	98.27997	97.56208
2834	97.00783	97.80555	98.73788	98.2843	97.56997
2833	97.01097	97.81158	98.74065	98.2911	97.5769
2832	97.01533	97.81629	98.74261	98.29814	97.58225
2831	97.01986	97.82066	98.7445	98.30376	97.58721
2830	97.02438	97.82534	98.74757	98.30692	97.59228
2829	97.03009	97.82981	98.75179	98.3076	97.59682
2828	97.03834	97.8335	98.7558	98.30689	97.60083
2827	97.04771	97.83628	98.75796	98.30554	97.60487
2826	97.05379	97.83794	98.75738	98.30334	97.60858
2825	97.05375	97.83873	98.75455	98.30082	97.61175
2824	97.0499	97.84001	98.75116	98.30043	97.61598
2823	97.04725	97.84297	98.74913	98.30438	97.62299

ACCEPTED MANUSCRIPT

2822	97.04869	97.84718	98.74969	98.312	97.63174
2821	97.05395	97.8516	98.75312	98.32045	97.63961
2820	97.06153	97.85635	98.75863	98.32718	97.64566
2819	97.06961	97.8622	98.76443	98.33102	97.65076
2818	97.07652	97.86887	98.76887	98.33234	97.65551
2817	97.08241	97.87535	98.77223	98.3335	97.66033
2816	97.08931	97.88092	98.77604	98.3376	97.66615
2815	97.09819	97.88484	98.78037	98.34503	97.67303
2814	97.10732	97.88646	98.78304	98.35254	97.67945
2813	97.11504	97.88713	98.78269	98.35704	97.68497
2812	97.1223	97.89039	98.7811	98.35905	97.69169
2811	97.13039	97.8982	98.78119	98.36089	97.70051
2810	97.13829	97.9084	98.78374	98.36342	97.70846
2809	97.14455	97.91792	98.78757	98.36673	97.71268
2808	97.14992	97.92668	98.79173	98.37211	97.71527
2807	97.15539	97.93585	98.79596	98.38038	97.72026
2806	97.1593	97.94397	98.79963	98.38899	97.7277
2805	97.15961	97.94844	98.8021	98.3938	97.73427
2804	97.15793	97.94973	98.80389	98.39358	97.73839
2803	97.15841	97.95085	98.806	98.39115	97.74104
2802	97.16319	97.95289	98.80814	98.39028	97.74275
2801	97.17121	97.95435	98.80888	98.39331	97.74364
2800	97.18043	97.9547	98.80766	98.40052	97.74554
2799	97.189	97.95555	98.80577	98.40977	97.75055
2798	97.19529	97.95804	98.80572	98.41693	97.75775
2797	97.19935	97.96179	98.80964	98.4191	97.7643
2796	97.20359	97.96667	98.81765	98.4176	97.76891
2795	97.20972	97.97337	98.82691	98.41645	97.77182
2794	97.21627	97.98163	98.8335	98.41831	97.77288
2793	97.22123	97.98983	98.83601	98.42297	97.77288
2792	97.22573	97.9967	98.83651	98.42886	97.77513
2791	97.23212	98.00167	98.83726	98.4344	97.78227
2790	97.23962	98.00369	98.83775	98.43826	97.7922
2789	97.24484	98.00159	98.83622	98.43981	97.8
2788	97.24646	97.99596	98.83295	98.43921	97.80319
2787	97.24667	97.98947	98.8304	98.43693	97.80258
2786	97.24817	97.98558	98.83087	98.43417	97.80024
2785	97.25197	97.9875	98.8352	98.43384	97.79932
2784	97.258	97.9969	98.843	98.43909	97.80379
2783	97.26544	98.01177	98.85265	98.44931	97.81423
2782	97.27248	98.02646	98.86161	98.45947	97.8253
2781	97.27716	98.03574	98.8679	98.46489	97.83094
2780	97.27865	98.03856	98.87098	98.46513	97.8308
2779	97.27698	98.03688	98.87089	98.46223	97.82895
2778	97.27277	98.03274	98.86784	98.45768	97.82812
2777	97.26837	98.02807	98.86328	98.45329	97.82878
2776	97.26764	98.02554	98.8601	98.45254	97.83163
2775	97.27283	98.02665	98.86025	98.45792	97.83687
2774	97.28225	98.02997	98.86303	98.46775	97.84223
2773	97.29207	98.0334	98.86653	98.4778	97.84557
2772	97.29941	98.03701	98.86962	98.48503	97.84791
2771	97.3027	98.04151	98.87159	98.48825	97.85063
2770	97.30165	98.04554	98.87165	98.48739	97.85171
2769	97.29862	98.04736	98.86998	98.48438	97.84875
2768	97.29782	98.04771	98.86836	98.48329	97.84411
2767	97.30092	98.04843	98.8682	98.48651	97.84277
2766	97.3051	98.04926	98.86914	98.49168	97.84619
2765	97.30728	98.04899	98.87043	98.49461	97.85196
2764	97.30821	98.04872	98.87206	98.4941	97.85795

2763	97.31025	98.05072	98.87351	98.49192	97.86282
2762	97.31376	98.05492	98.87333	98.48965	97.86462
2761	97.31836	98.05957	98.87186	98.48845	97.8634
2760	97.32553	98.06452	98.87267	98.49068	97.86402
2759	97.33644	98.07073	98.87877	98.49828	97.87139
2758	97.34836	98.07705	98.8883	98.50931	97.88348
2757	97.35643	98.0806	98.89605	98.51859	97.89312
2756	97.35858	98.08043	98.8985	98.52226	97.89605
2755	97.3567	98.0781	98.89609	98.5205	97.89357
2754	97.35407	98.07523	98.89172	98.51648	97.88857
2753	97.35342	98.07302	98.88876	98.51389	97.88351
2752	97.35603	98.07347	98.88976	98.51481	97.88137
2751	97.36022	98.0779	98.89459	98.51824	97.88418
2750	97.36241	98.0843	98.90028	98.52131	97.89027
2749	97.3616	98.08918	98.90379	98.52283	97.89632
2748	97.3613	98.09196	98.90479	98.52468	97.90142
2747	97.36477	98.09492	98.90492	98.52872	97.90642
2746	97.37025	98.09893	98.90552	98.534	97.91063
2745	97.37378	98.10213	98.90709	98.5383	97.91283
2744	97.37472	98.10292	98.90963	98.54057	97.91439
2743	97.3758	98.10194	98.91214	98.5407	97.91747
2742	97.37904	98.10084	98.91316	98.53869	97.92124
2741	97.38435	98.10113	98.91299	98.53592	97.92332
2740	97.39103	98.10406	98.91396	98.53539	97.92376
2739	97.39792	98.10946	98.91708	98.53868	97.92417
2738	97.40354	98.1147	98.92025	98.54413	97.92448
2737	97.40807	98.11691	98.92133	98.54946	97.92413
2736	97.41366	98.11612	98.92134	98.5544	97.92482
2735	97.4207	98.11454	98.92251	98.55898	97.92813
2734	97.42592	98.11369	98.92485	98.56163	97.93185
2733	97.42677	98.11392	98.92689	98.56116	97.93295
2732	97.42543	98.11571	98.92843	98.55909	97.9327
2731	97.42578	98.11897	98.92983	98.55768	97.93478
2730	97.4283	98.12201	98.92977	98.55731	97.93957
2729	97.43099	98.12346	98.9266	98.55739	97.94442
2728	97.43343	98.12444	98.92154	98.55824	97.94829
2727	97.43658	98.12669	98.91851	98.56003	97.95211
2726	97.44023	98.12997	98.92048	98.5618	97.95564
2725	97.4437	98.13352	98.92721	98.56353	97.95795
2724	97.44758	98.13846	98.9358	98.56693	97.95993
2723	97.45195	98.14549	98.94233	98.57256	97.9626
2722	97.45494	98.15177	98.94431	98.57815	97.96469
2721	97.45572	98.15391	98.94327	98.58193	97.9654
2720	97.45706	98.15322	98.94364	98.58493	97.96765
2719	97.46172	98.15415	98.94764	98.58781	97.97414
2718	97.46818	98.15784	98.9524	98.58853	97.98207
2717	97.47304	98.16106	98.9538	98.58602	97.98652
2716	97.47591	98.16147	98.95153	98.5832	97.98724
2715	97.47826	98.16022	98.94821	98.58324	97.9874
2714	97.47954	98.15904	98.94516	98.58521	97.98751
2713	97.47814	98.15799	98.94152	98.58676	97.98584
2712	97.47487	98.15709	98.93689	98.58857	97.9835
2711	97.4721	98.1574	98.93238	98.59215	97.98346
2710	97.47061	98.15944	98.92959	98.59562	97.98498
2709	97.47057	98.16249	98.93007	98.59589	97.98429
2708	97.47377	98.16602	98.93479	98.59385	97.98084
2707	97.48133	98.16992	98.94243	98.59333	97.97826
2706	97.49048	98.1734	98.94931	98.59579	97.97936
2705	97.4973	98.17548	98.95307	98.59933	97.98373

2704	97.50134	98.17659	98.95519	98.60199	97.98981
2703	97.5044	98.17783	98.95819	98.60296	97.99548
2702	97.50662	98.17904	98.96188	98.6019	97.99785
2701	97.50729	98.17954	98.96454	98.60019	97.99645
2700	97.50799	98.17992	98.96617	98.60138	97.9955
2699	97.51068	98.18114	98.96762	98.60707	97.99884
2698	97.51414	98.18251	98.96817	98.61348	98.00426
2697	97.5161	98.1829	98.96702	98.61575	98.00724
2696	97.51788	98.18339	98.96615	98.6145	98.00836
2695	97.52256	98.18619	98.96831	98.61478	98.01165
2694	97.52955	98.19132	98.9725	98.61928	98.01711
2693	97.53479	98.19654	98.97444	98.626	98.02042
2692	97.53618	98.20026	98.97179	98.63167	98.01977
2691	97.5352	98.20241	98.96635	98.63418	98.01767
2690	97.53383	98.20332	98.96149	98.63275	98.01631
2689	97.53312	98.20364	98.95952	98.62883	98.01574
2688	97.53375	98.20465	98.96131	98.62633	98.0165
2687	97.53505	98.2062	98.96572	98.62786	98.01941
2686	97.53449	98.20574	98.96945	98.63152	98.02284
2685	97.53162	98.20199	98.96964	98.63387	98.02467
2684	97.53075	98.19846	98.96713	98.63472	98.02634
2683	97.53599	98.20018	98.96544	98.63595	98.03085
2682	97.54504	98.20776	98.96665	98.63754	98.03746
2681	97.55206	98.21713	98.96998	98.63845	98.04263
2680	97.55555	98.22437	98.97373	98.63992	98.04533
2679	97.55894	98.22774	98.97662	98.64379	98.04701
2678	97.56401	98.22639	98.9775	98.64817	98.04742
2677	97.56857	98.22092	98.97625	98.64935	98.04543
2676	97.57097	98.21506	98.97482	98.64761	98.04335
2675	97.57234	98.21306	98.97529	98.64709	98.04506
2674	97.5738	98.21488	98.97699	98.64957	98.04964
2673	97.57459	98.2167	98.97713	98.65206	98.05185
2672	97.57396	98.2163	98.97441	98.65118	98.04898
2671	97.57197	98.21515	98.97015	98.64694	98.04323
2670	97.56856	98.21522	98.96642	98.64169	98.03754
2669	97.56413	98.21668	98.96454	98.63763	98.0335
2668	97.56071	98.21889	98.96515	98.6359	98.03298
2667	97.55997	98.22104	98.96756	98.63573	98.03674
2666	97.56045	98.22139	98.96925	98.63456	98.04135
2665	97.55915	98.21817	98.96765	98.63064	98.04146
2664	97.55511	98.21158	98.96249	98.62528	98.03575
2663	97.5489	98.20333	98.95511	98.62052	98.02695
2662	97.54012	98.19445	98.94614	98.61572	98.01691
2661	97.52854	98.18546	98.93583	98.6087	98.00573
2660	97.51657	98.17752	98.92595	98.59939	97.99507
2659	97.5072	98.17122	98.91907	98.58964	97.98725
2658	97.50027	98.16488	98.91589	98.58051	97.98124
2657	97.49412	98.15696	98.91506	98.57246	97.97405
2656	97.48979	98.14943	98.91552	98.56773	97.96643
2655	97.48984	98.1463	98.91738	98.569	97.96266
2654	97.49384	98.14891	98.92047	98.57586	97.96438
2653	97.49869	98.15493	98.92343	98.58468	97.96854
2652	97.50259	98.1611	98.92428	98.59197	97.97156
2651	97.50508	98.16449	98.92104	98.59544	97.97167
2650	97.50415	98.1622	98.91297	98.59319	97.96759
2649	97.49789	98.15355	98.90264	98.58504	97.95944
2648	97.48883	98.14222	98.89527	98.5744	97.95087
2647	97.4822	98.13351	98.89402	98.56617	97.94602
2646	97.47996	98.1298	98.89676	98.56246	97.94452

2645	97.48022	98.13093	98.89962	98.56253	97.94335
2644	97.48232	98.13717	98.90227	98.56573	97.94286
2643	97.48789	98.14783	98.90701	98.57153	97.94595
2642	97.4965	98.15807	98.91357	98.57733	97.95177
2641	97.5041	98.1617	98.91818	98.57937	97.95522
2640	97.50717	98.15767	98.9181	98.5765	97.95367
2639	97.5055	98.15057	98.91446	98.57103	97.94967
2638	97.50095	98.14476	98.91016	98.56629	97.94696
2637	97.49631	98.14144	98.90714	98.56492	97.94738
2636	97.49475	98.1406	98.90579	98.56811	97.95108
2635	97.49708	98.1418	98.90516	98.574	97.95581
2634	97.49965	98.14292	98.90348	98.57806	97.95647
2633	97.49847	98.14197	98.90006	98.57753	97.95009
2632	97.4947	98.14045	98.89636	98.57464	97.94087
2631	97.49272	98.14146	98.89409	98.57308	97.93599
2630	97.49384	98.14483	98.89327	98.57317	97.93717
2629	97.49578	98.14756	98.89389	98.57301	97.94038
2628	97.4976	98.14877	98.89786	98.57254	97.94227
2627	97.50048	98.15006	98.90621	98.57292	97.94239
2626	97.50372	98.15124	98.91539	98.57331	97.94021
2625	97.50432	98.15008	98.91976	98.5716	97.93541
2624	97.50102	98.14645	98.91764	98.56754	97.92998
2623	97.49542	98.14271	98.91216	98.56238	97.9253
2622	97.48929	98.13961	98.9064	98.55701	97.91865
2621	97.48418	98.13576	98.90104	98.55321	97.90774
2620	97.48282	98.13171	98.89699	98.55471	97.89669
2619	97.48657	98.13012	98.89659	98.56294	97.89169
2618	97.49184	98.13112	98.90051	98.57304	97.89225
2617	97.49313	98.13151	98.90571	98.57776	97.89277
2616	97.48989	98.12957	98.908	98.57479	97.89124
2615	97.48669	98.12719	98.90585	98.56762	97.89019
2614	97.4869	98.1263	98.90139	98.56059	97.89011
2613	97.48974	98.12659	98.89864	98.55634	97.88879
2612	97.49321	98.12769	98.90075	98.55637	97.88647
2611	97.49623	98.13032	98.90746	98.56039	97.88557
2610	97.49792	98.13424	98.91504	98.56558	97.88543
2609	97.498	98.13774	98.9196	98.56922	97.8831
2608	97.49781	98.13978	98.92029	98.57095	97.87862
2607	97.49841	98.14024	98.91864	98.57087	97.87437
2606	97.49875	98.13805	98.91625	98.56791	97.87044
2605	97.49791	98.13207	98.91424	98.56257	97.86602
2604	97.4972	98.12396	98.9135	98.55826	97.86336
2603	97.49714	98.11713	98.91372	98.55694	97.8642
2602	97.49516	98.11312	98.91324	98.55641	97.86457
2601	97.48997	98.11127	98.91138	98.55466	97.8596
2600	97.48558	98.11131	98.90939	98.55355	97.85166
2599	97.48657	98.11323	98.90791	98.55485	97.84701
2598	97.49203	98.1154	98.90598	98.55655	97.84643
2597	97.49854	98.11651	98.90447	98.55694	97.84631
2596	97.50619	98.11854	98.90771	98.55836	97.84678
2595	97.51609	98.12442	98.91795	98.56251	97.85091
2594	97.52478	98.13315	98.93049	98.56605	97.85722
2593	97.52758	98.14077	98.93794	98.56595	97.8609
2592	97.52572	98.14544	98.93835	98.56542	97.8617
2591	97.52439	98.14832	98.93569	98.56898	97.86313
2590	97.5249	98.15029	98.93341	98.57515	97.86524
2589	97.52438	98.15174	98.93172	98.57968	97.86539
2588	97.52224	98.15447	98.93061	98.58265	97.86481
2587	97.5212	98.15986	98.93145	98.58676	97.86661

2586 97.52266 98.16547 98.93447 98.59131 97.86866
2585 97.52562 98.16707 98.93719 98.59362 97.86597
2584 97.52891 98.16351 98.93611 98.59349 97.85901
2583 97.53004 98.15638 98.92904 98.59107 97.85234
2582 97.52473 98.14686 98.91685 98.58421 97.8467
2581 97.51316 98.13692 98.90489 98.57363 97.84044
2580 97.50405 98.1317 98.90083 98.56697 97.83666
2579 97.50596 98.13535 98.90819 98.57056 97.84024
2578 97.51642 98.14521 98.9222 98.5802 97.84898
2577 97.52588 98.15446 98.93418 98.58689 97.85622
2576 97.53063 98.15993 98.93926 98.58854 97.86102
2575 97.53478 98.16328 98.93841 98.58936 97.86747
2574 97.54088 98.16576 98.93506 98.59108 97.87496
2573 97.54616 98.16688 98.93251 98.5928 97.8784
2572 97.54807 98.16723 98.93304 98.59656 97.87745
2571 97.54733 98.16783 98.93604 98.60463 97.87659
2570 97.54526 98.16719 98.93795 98.61258 97.87627
2569 97.54368 98.16399 98.93653 98.61324 97.87283
2568 97.54676 98.16162 98.93404 98.60684 97.86711
2567 97.55718 98.16497 98.93392 98.60024 97.86469
2566 97.5706 98.17315 98.9357 98.59717 97.86725
2565 97.57945 98.18026 98.93656 98.59628 97.87139
2564 97.58156 98.18301 98.93613 98.59717 97.87581
2563 97.58033 98.18284 98.93626 98.60064 97.88133
2562 97.57786 98.18089 98.9367 98.60343 97.8843
2561 97.57367 98.17644 98.93481 98.60065 97.87889
2560 97.56933 98.17059 98.92993 98.59373 97.86686
2559 97.56809 98.16678 98.92534 98.58952 97.85718
2558 97.57002 98.167 98.92491 98.59108 97.85507
2557 97.57233 98.17083 98.92915 98.59516 97.85805
2556 97.57391 98.17778 98.93424 98.59825 97.86261
2555 97.57473 98.18649 98.93459 98.59901 97.86767
2554 97.57254 98.19264 98.92793 98.5952 97.87129
2553 97.56552 98.19234 98.91874 98.5849 97.87107
2552 97.55694 98.18731 98.91458 98.57129 97.86811
2551 97.55212 98.18264 98.9175 98.56107 97.86505
2550 97.55182 98.17996 98.92163 98.55788 97.86112
2549 97.55323 98.17706 98.92112 98.56107 97.85501
2548 97.55541 98.17333 98.91725 98.56896 97.85015
2547 97.55847 98.17072 98.91525 98.57831 97.85009
2546 97.55994 98.16981 98.91681 98.58319 97.85081
2545 97.5577 98.16957 98.91926 98.58036 97.84562
2544 97.55472 98.17059 98.92002 98.5744 97.8357
2543 97.5552 98.17397 98.91866 98.5715 97.82786
2542 97.55788 98.17764 98.91598 98.57047 97.82355
2541 97.55889 98.17813 98.91394 98.56611 97.81818
2540 97.55879 98.17559 98.91513 98.55912 97.80992
2539 97.56047 98.17248 98.9196 98.55506 97.80051
2538 97.56196 98.16769 98.92358 98.55456 97.78857
2537 97.55793 98.15688 98.92341 98.55173 97.76999
2536 97.54691 98.13899 98.91889 98.54243 97.74482
2535 97.53137 98.11838 98.91132 98.52811 97.71648
2534 97.51239 98.09994 98.90084 98.51212 97.68555
2533 97.49028 98.08531 98.8882 98.49764 97.65117
2532 97.46848 98.07368 98.87606 98.48789 97.6164
2531 97.45056 98.06334 98.86564 98.48245 97.58488
2530 97.43482 98.0526 98.85461 98.47475 97.5545
2529 97.4177 98.0415 98.84114 98.45941 97.52182
2528 97.40064 98.03184 98.82773 98.44115 97.49031

ACCEPTED MANUSCRIPT

2527	97.38794	98.02356	98.81821	98.43007	97.4659
2526	97.37963	98.01316	98.81327	98.4291	97.44634
2525	97.37225	97.99799	98.81097	98.43218	97.42352
2524	97.36469	97.98	98.80914	98.43363	97.39499
2523	97.35774	97.96298	98.80539	98.43269	97.36545
2522	97.35045	97.94914	98.7983	98.4296	97.33881
2521	97.34241	97.94084	98.79118	98.42424	97.31607
2520	97.33704	97.94083	98.79056	98.4187	97.29917
2519	97.33633	97.94676	98.79755	98.41542	97.28882
2518	97.33508	97.94939	98.80453	98.41261	97.28042
2517	97.32677	97.94182	98.80419	98.40673	97.26952
2516	97.31301	97.9277	98.79818	98.39925	97.2588
2515	97.30092	97.91615	98.79332	98.39541	97.25277
2514	97.29408	97.91173	98.79298	98.39675	97.24915
2513	97.29208	97.91382	98.79678	98.40031	97.24372
2512	97.29577	97.92168	98.80462	98.40466	97.24012
2511	97.30555	97.93394	98.81558	98.41134	97.24571
2510	97.31716	97.9461	98.82549	98.42025	97.26047
2509	97.32615	97.95431	98.83068	98.42845	97.27916
2508	97.33447	97.95979	98.83258	98.43393	97.30148
2507	97.34654	97.96515	98.8346	98.43705	97.33045
2506	97.36162	97.97028	98.83685	98.4393	97.36328
2505	97.37694	97.97656	98.83827	98.44394	97.39394
2504	97.39454	97.98995	98.84063	98.45519	97.42332
2503	97.41717	98.01299	98.84574	98.47253	97.45725
2502	97.44073	98.03803	98.85134	98.48876	97.49593
2501	97.45937	98.05608	98.855	98.49846	97.5348
2500	97.4753	98.0691	98.85981	98.50572	97.57376
2499	97.49464	98.08515	98.87053	98.51778	97.6158
2498	97.51578	98.10463	98.88566	98.53419	97.65767
2497	97.53113	98.12034	98.89837	98.54843	97.6921
2496	97.53912	98.12962	98.90439	98.55783	97.71873
2495	97.54572	98.13722	98.9051	98.56504	97.74365
2494	97.55515	98.14703	98.90445	98.57189	97.76902
2493	97.56749	98.15932	98.90696	98.57847	97.79217
2492	97.58388	98.17551	98.91658	98.58671	97.8137
2491	97.60513	98.19684	98.93232	98.59793	97.83724
2490	97.62564	98.21778	98.94659	98.60839	97.86178
2489	97.6377	98.22931	98.95228	98.61358	97.88305
2488	97.64175	98.23035	98.95029	98.61571	97.90156
2487	97.64472	98.22924	98.94654	98.62062	97.92081
2486	97.64906	98.23248	98.94421	98.62883	97.93925
2485	97.65197	98.23873	98.94368	98.63634	97.95257
2484	97.65457	98.24459	98.94712	98.64286	97.9623
2483	97.6622	98.25023	98.95683	98.65187	97.97352
2482	97.67491	98.25712	98.96993	98.663	97.98611
2481	97.68607	98.26539	98.98022	98.6715	97.99694
2480	97.692	98.27455	98.98494	98.67542	98.00806
2479	97.69567	98.28309	98.98565	98.67775	98.0234
2478	97.7002	98.28782	98.98415	98.681	98.03986
2477	97.70556	98.28789	98.98218	98.68511	98.05113
2476	97.7122	98.28827	98.98347	98.69007	98.05787
2475	97.72079	98.29415	98.99047	98.6955	98.06474
2474	97.72805	98.3036	98.99989	98.69841	98.07036
2473	97.72978	98.3111	99.00622	98.69667	98.0709
2472	97.7285	98.31659	99.00891	98.69356	98.07085
2471	97.73108	98.32402	99.01159	98.69395	98.07868
2470	97.73872	98.33247	99.01515	98.69749	98.09289
2469	97.74567	98.33607	99.01691	98.70077	98.10372

2468	97.74837	98.33323	99.01627	98.70428	98.10803
2467	97.74901	98.329	99.01647	98.71132	98.11201
2466	97.74981	98.32758	99.0202	98.72109	98.11935
2465	97.75016	98.32826	99.0269	98.72872	98.1268
2464	97.75004	98.32924	99.03406	98.73127	98.13123
2463	97.75018	98.32991	99.0383	98.72884	98.1321
2462	97.74876	98.32889	99.0367	98.72206	98.12797
2461	97.74367	98.32545	99.03032	98.71387	98.11959
2460	97.73783	98.32264	99.02432	98.71104	98.11456
2459	97.7362	98.32363	99.02101	98.71702	98.1192
2458	97.73819	98.32532	99.0157	98.72514	98.12783
2457	97.7391	98.32172	99.00446	98.72577	98.13019
2456	97.7384	98.31386	98.99315	98.71926	98.12726
2455	97.74011	98.30966	98.99205	98.71475	98.12893
2454	97.7453	98.31307	99.00269	98.71756	98.1378
2453	97.75088	98.31959	99.01641	98.7246	98.14714
2452	97.75541	98.32385	99.0254	98.73155	98.15357
2451	97.75993	98.32603	99.02908	98.7372	98.1598
2450	97.76354	98.32907	99.02979	98.74057	98.16528
2449	97.76485	98.33451	99.02927	98.74106	98.16661
2448	97.76698	98.34273	99.03084	98.7418	98.16751
2447	97.77419	98.35292	99.03857	98.74674	98.17601
2446	97.78383	98.36154	99.05117	98.7536	98.19053
2445	97.78886	98.36502	99.06116	98.75575	98.2003
2444	97.78817	98.3649	99.06301	98.75168	98.20124
2443	97.78737	98.36628	99.05921	98.74694	98.20013
2442	97.78951	98.37063	99.05621	98.7464	98.20146
2441	97.79254	98.37448	99.05707	98.74998	98.20148
2440	97.79599	98.37559	99.0598	98.75621	98.19777
2439	97.80245	98.3761	99.0611	98.76439	98.19443
2438	97.8112	98.37882	99.06009	98.77221	98.19476
2437	97.81736	98.3842	99.05947	98.77664	98.19758
2436	97.81919	98.39157	99.06286	98.77816	98.20299
2435	97.82003	98.3998	99.07	98.7802	98.21271
2434	97.82161	98.40592	99.07569	98.78403	98.22319
2433	97.82127	98.40674	99.07516	98.78767	98.22708
2432	97.81707	98.40236	99.06937	98.78972	98.22345
2431	97.81068	98.39561	99.06288	98.78995	98.21867
2430	97.80434	98.38828	99.05818	98.78678	98.21582
2429	97.79958	98.38134	99.0549	98.77876	98.21187
2428	97.79943	98.37802	99.05302	98.76888	98.20681
2427	97.80684	98.38259	99.05345	98.7636	98.20705
2426	97.82027	98.39541	99.0562	98.76727	98.21732
2425	97.83465	98.4116	99.06082	98.77955	98.23557
2424	97.84658	98.42486	99.06785	98.79667	98.25673
2423	97.85452	98.43104	99.07677	98.81242	98.27521
2422	97.85572	98.42942	99.08381	98.81981	98.28414
2421	97.84894	98.4233	99.08531	98.81623	98.28013
2420	97.83992	98.41832	99.0832	98.80648	98.26957
2419	97.83789	98.41774	99.08383	98.79799	98.26321
2418	97.84567	98.42015	99.09077	98.79437	98.26394
2417	97.85727	98.4229	99.10093	98.79543	98.26605
2416	97.86536	98.42539	99.10798	98.80009	98.26557
2415	97.86735	98.42708	99.1082	98.80577	98.26406
2414	97.86461	98.42606	99.10314	98.80829	98.26284
2413	97.86042	98.42255	99.0979	98.80672	98.2613
2412	97.85873	98.42092	99.09637	98.80585	98.26086
2411	97.86139	98.42456	99.09791	98.8103	98.26363
2410	97.86659	98.43155	99.09963	98.81882	98.26725

2409	97.87234	98.43874	99.1016	98.82771	98.26783
2408	97.87957	98.4466	99.10634	98.83608	98.26736
2407	97.88879	98.45639	99.11284	98.84326	98.27125
2406	97.8966	98.46553	99.11525	98.8451	98.27916
2405	97.89994	98.47033	99.11032	98.83871	98.28536
2404	97.90126	98.47117	99.10281	98.82863	98.28763
2403	97.90509	98.47113	99.10036	98.82301	98.28964
2402	97.91146	98.4715	99.1054	98.82523	98.29504
2401	97.9169	98.47196	99.11453	98.8328	98.30448
2400	97.91969	98.47242	99.12342	98.84157	98.31668
2399	97.92023	98.47196	99.12947	98.84745	98.32717
2398	97.91883	98.46932	99.13209	98.84753	98.32907
2397	97.91739	98.46675	99.13306	98.84401	98.32133
2396	97.92006	98.46941	99.13482	98.84373	98.31343
2395	97.92792	98.47771	99.13694	98.84956	98.315
2394	97.93551	98.48482	99.13665	98.85563	98.32389
2393	97.93713	98.48547	99.13399	98.85544	98.33081
2392	97.93336	98.48216	99.13246	98.85067	98.33171
2391	97.92744	98.47868	99.13254	98.84715	98.32845
2390	97.91944	98.47336	99.12958	98.84615	98.32168
2389	97.90939	98.46437	99.12152	98.84553	98.31227
2388	97.90194	98.45638	99.11443	98.84591	98.30659
2387	97.90145	98.45509	99.11556	98.8496	98.31056
2386	97.9054	98.45878	99.12396	98.85573	98.32023
2385	97.90861	98.46175	99.13247	98.86194	98.32662
2384	97.91149	98.463	99.13647	98.8688	98.32867
2383	97.91792	98.46513	99.13661	98.87731	98.33332
2382	97.92731	98.46714	99.13535	98.88454	98.3438
2381	97.93518	98.46552	99.13561	98.88751	98.35674
2380	97.94016	98.46131	99.14105	98.88953	98.37029
2379	97.94333	98.45875	99.1516	98.89585	98.38548
2378	97.94242	98.45802	99.15985	98.90432	98.39886
2377	97.93499	98.45688	99.15849	98.9077	98.40486
2376	97.92636	98.45818	99.15148	98.90433	98.40732
2375	97.92437	98.46547	99.15075	98.89814	98.41603
2374	97.92676	98.47223	99.1607	98.88985	98.42874
2373	97.92507	98.46788	99.17353	98.87854	98.43137
2372	97.91997	98.455	99.18049	98.87042	98.41986
2371	97.91899	98.44605	99.17953	98.87291	98.40541
2370	97.92074	98.44254	99.17061	98.88156	98.39359
2369	97.91865	98.43453	99.15366	98.88725	98.37887
2368	97.91704	98.4211	99.13374	98.89222	98.36417
2367	97.92119	98.41052	99.11864	98.90033	98.36038
2366	97.91689	98.40065	99.10997	98.89887	98.36103
2365	97.88998	98.38473	99.10618	98.87645	98.34764
2364	97.86125	98.37613	99.11055	98.85203	98.32608
2363	97.86473	98.39629	99.1231	98.85392	98.32329
2362	97.89357	98.43534	99.1309	98.87534	98.34297
2361	97.9089	98.45624	99.12478	98.88513	98.36123
2360	97.8976	98.44308	99.11587	98.8762	98.36658
2359	97.88281	98.41516	99.11826	98.86556	98.36756
2358	97.88167	98.39552	99.12901	98.85827	98.36361
2357	97.88944	98.39164	99.13614	98.84759	98.34611
2356	97.90242	98.39987	99.13983	98.83808	98.3258
2355	97.9207	98.41045	99.14465	98.84086	98.32157
2354	97.93488	98.4121	99.14326	98.85201	98.3327
2353	97.93136	98.40401	99.12903	98.85853	98.34413
2352	97.91161	98.39626	99.11045	98.85672	98.34833
2351	97.89052	98.3948	99.10362	98.85159	98.34604

2350	97.87594	98.39554	99.1097	98.84588	98.3379
2349	97.86549	98.39244	99.11606	98.83821	98.32653
2348	97.85586	98.38591	99.11142	98.83013	98.31811
2347	97.84846	98.3805	99.09389	98.8254	98.31639
2346	97.84427	98.37563	99.0734	98.82208	98.31494
2345	97.83743	98.36469	99.06336	98.81322	98.30302
2344	97.82145	98.34628	99.06873	98.7987	98.28367
2343	97.7972	98.32845	99.07785	98.7871	98.26864
2342	97.7712	98.31346	99.07606	98.77915	98.26053
2341	97.75201	98.29884	99.06524	98.77187	98.25581
2340	97.75282	98.2924	99.05976	98.77158	98.2597
2339	97.77928	98.30485	99.07002	98.78305	98.27686
2338	97.81507	98.33183	99.08943	98.79513	98.29504
2337	97.83574	98.35976	99.10675	98.79475	98.30009
2336	97.83532	98.38586	99.11979	98.78822	98.29927
2335	97.82638	98.41339	99.13017	98.78902	98.30881
2334	97.81816	98.43383	99.13038	98.79431	98.32386
2333	97.80989	98.43083	99.11338	98.78929	98.32635
2332	97.80327	98.40532	99.08927	98.77465	98.3154
2331	97.80597	98.37747	99.0805	98.76735	98.31018
2330	97.81583	98.36215	99.09278	98.77612	98.31601
2329	97.81671	98.35075	99.10626	98.78457	98.31567
2328	97.79033	98.32582	99.09728	98.77022	98.29053
2327	97.73024	98.2775	99.05566	98.72235	98.23769
2326	97.64574	98.20871	98.99074	98.64827	98.16394
2325	97.56294	98.13655	98.92244	98.57196	98.08605
2324	97.51731	98.0888	98.87704	98.52588	98.03235
2323	97.52636	98.08607	98.87038	98.52951	98.02587
2322	97.57241	98.12117	98.89698	98.5718	98.06135
2321	97.62156	98.16678	98.93708	98.62411	98.11187
2320	97.65771	98.20303	98.97272	98.66668	98.15554
2319	97.68424	98.22651	98.99656	98.69311	98.18445
2318	97.70182	98.23961	99.00688	98.70198	98.19418
2317	97.70577	98.24404	99.00686	98.69688	98.18667
2316	97.69884	98.24575	99.00336	98.69155	98.17402
2315	97.69206	98.25024	99.00093	98.69664	98.16823
2314	97.69125	98.2557	98.99876	98.70786	98.16628
2313	97.69483	98.2566	98.99556	98.71295	98.16112
2312	97.70218	98.25593	98.99663	98.71155	98.15705
2311	97.71411	98.26147	99.00652	98.7125	98.16306
2310	97.72567	98.27324	99.02098	98.71825	98.17326
2309	97.73029	98.28188	99.02945	98.72118	98.17457
2308	97.73081	98.2825	99.02838	98.71812	98.16689
2307	97.73553	98.27959	99.02234	98.71388	98.1622
2306	97.74425	98.27941	99.01727	98.71277	98.1644
2305	97.74772	98.28309	99.01415	98.7135	98.16678
2304	97.74229	98.2888	99.01157	98.71492	98.16585
2303	97.73459	98.29361	99.00811	98.7173	98.16491
2302	97.73136	98.29472	99.00358	98.71942	98.16392
2301	97.73238	98.29254	99.00013	98.71898	98.15986
2300	97.73429	98.2922	99.0007	98.71723	98.15456
2299	97.73471	98.29532	99.00421	98.71523	98.15207
2298	97.73064	98.29491	99.00497	98.70948	98.14787
2297	97.72039	98.28378	98.99909	98.69552	98.13489
2296	97.70689	98.26627	98.98937	98.67596	98.11711
2295	97.69467	98.25271	98.9792	98.65689	98.10621
2294	97.68342	98.24536	98.96737	98.64025	98.10345
2293	97.67025	98.23719	98.9513	98.62453	98.09834
2292	97.65628	98.22406	98.93454	98.61086	98.08451

2291	97.6445	98.20964	98.92315	98.60066	98.06614
2290	97.63305	98.19848	98.91853	98.59033	98.04803
2289	97.61708	98.19101	98.91633	98.57536	98.03056
2288	97.59708	98.18533	98.91266	98.55793	98.01485
2287	97.5788	98.17912	98.90625	98.54406	98.00328
2286	97.56737	98.17069	98.89763	98.53586	97.99548
2285	97.56654	98.16387	98.88983	98.53367	97.99206
2284	97.58069	98.16846	98.88813	98.54119	97.99995
2283	97.60947	98.18935	98.8952	98.56057	98.02303
2282	97.64322	98.21772	98.90809	98.58515	98.05148
2281	97.67094	98.24034	98.92301	98.60608	98.07153
2280	97.69081	98.25449	98.93891	98.62317	98.08307
2279	97.70579	98.26589	98.95364	98.64062	98.09469
2278	97.71384	98.27592	98.96135	98.65574	98.10613
2277	97.71257	98.28134	98.96028	98.66272	98.11152
2276	97.70852	98.2838	98.95768	98.66438	98.1163
2275	97.71035	98.2882	98.96084	98.66859	98.13219
2274	97.71518	98.29332	98.96654	98.67515	98.15598
2273	97.71335	98.29396	98.96633	98.67669	98.17049
2272	97.70397	98.29075	98.95894	98.67094	98.16732
2271	97.69587	98.28852	98.95115	98.66227	98.15396
2270	97.69608	98.28832	98.95028	98.65438	98.14018
2269	97.70668	98.29041	98.96083	98.65094	98.1327
2268	97.72757	98.30004	98.98331	98.65865	98.13936
2267	97.75119	98.31874	99.00942	98.67798	98.16056
2266	97.76086	98.33486	99.02433	98.69585	98.17877
2265	97.748	98.33645	99.02187	98.69984	98.17532
2264	97.72627	98.32934	99.01297	98.69577	98.15644
2263	97.71536	98.32828	99.01111	98.69806	98.14508
2262	97.71601	98.33328	99.01532	98.70701	98.14916
2261	97.71483	98.33044	99.01532	98.7099	98.1562
2260	97.70782	98.31426	99.00767	98.7014	98.15676
2259	97.70352	98.29507	98.99699	98.68935	98.15412
2258	97.70745	98.28467	98.98684	98.68195	98.15202
2257	97.71888	98.28754	98.98015	98.68202	98.15103
2256	97.73887	98.30422	98.98336	98.69091	98.15646
2255	97.76549	98.32935	98.99877	98.70581	98.17221
2254	97.78469	98.34772	99.01532	98.71581	98.18822
2253	97.78306	98.34644	99.01864	98.71295	98.19132
2252	97.76783	98.33116	99.00884	98.70443	98.18555
2251	97.75886	98.31845	98.9996	98.70232	98.18523
2250	97.76383	98.31452	99.00187	98.7064	98.19254
2249	97.77569	98.31413	99.01615	98.7093	98.20037
2248	97.78878	98.31602	99.03676	98.71231	98.21005
2247	97.80067	98.32414	99.05434	98.72138	98.22566
2246	97.80291	98.33532	99.05795	98.73224	98.23632
2245	97.78868	98.34152	99.04482	98.73512	98.22771
2244	97.76832	98.34364	99.02619	98.73059	98.20745
2243	97.75913	98.34869	99.01503	98.72606	98.19646
2242	97.76154	98.35461	99.01135	98.72106	98.19866
2241	97.76121	98.3532	99.00715	98.71117	98.20141
2240	97.75199	98.3468	99.00083	98.702	98.2013
2239	97.73989	98.34638	98.99702	98.70261	98.20503
2238	97.72798	98.35361	98.99716	98.70835	98.20848
2237	97.7157	98.36045	99.00022	98.7068	98.20083
2236	97.70954	98.36572	99.00838	98.69826	98.18817
2235	97.71594	98.37568	99.02172	98.69437	98.18792
2234	97.72624	98.38732	99.03169	98.69914	98.20064
2233	97.72743	98.38757	99.03042	98.70645	98.21084

2232	97.72406	98.37165	99.02238	98.71311	98.21341
2231	97.72975	98.34872	99.01675	98.71924	98.21506
2230	97.74093	98.32865	99.01329	98.71941	98.21273
2229	97.74127	98.31558	99.00708	98.70909	98.19703
2228	97.73022	98.31321	99.0014	98.69645	98.17547
2227	97.72398	98.32263	99.00344	98.69269	98.16644
2226	97.72814	98.33586	99.01134	98.6956	98.17153
2225	97.73152	98.34444	99.01734	98.69712	98.17785
2224	97.72853	98.3522	99.01985	98.6998	98.18402
2223	97.72639	98.36644	99.02114	98.70897	98.1978
2222	97.7282	98.38142	99.01807	98.71645	98.2121
2221	97.72873	98.38642	99.008	98.71167	98.21187
2220	97.72897	98.38555	98.9993	98.70234	98.20245
2219	97.73609	98.39105	99.00255	98.70363	98.2027
2218	97.74723	98.40026	99.01479	98.71256	98.21253
2217	97.75112	98.3986	99.02432	98.71437	98.21607
2216	97.74633	98.38381	99.02709	98.70904	98.21395
2215	97.74095	98.36795	99.02573	98.7089	98.22133
2214	97.7357	98.35604	99.01795	98.71341	98.2355
2213	97.72592	98.34173	99.00072	98.70931	98.23726
2212	97.71761	98.32397	98.98254	98.69428	98.22495
2211	97.72164	98.30991	98.97679	98.67962	98.21623
2210	97.73343	98.3011	98.98432	98.67084	98.21526
2209	97.7382	98.29388	98.99448	98.66505	98.20831
2208	97.73409	98.29319	99.00038	98.66467	98.19283
2207	97.73029	98.30825	99.00178	98.67426	98.1811
2206	97.72576	98.33428	98.99797	98.6866	98.17455
2205	97.71221	98.35528	98.99134	98.69103	98.164
2204	97.69612	98.36555	98.99303	98.69194	98.15529
2203	97.69409	98.37237	99.01009	98.69929	98.16399
2202	97.70674	98.378	99.03036	98.70612	98.1838
2201	97.71892	98.37587	99.03463	98.69715	98.19056
2200	97.7256	98.36489	99.0219	98.67579	98.17948
2199	97.73555	98.35177	99.00914	98.6606	98.1689
2198	97.74909	98.34004	99.00844	98.65829	98.16642
2197	97.75493	98.33064	99.01745	98.66172	98.16157
2196	97.75044	98.33025	99.02909	98.66975	98.15287
2195	97.74431	98.34338	99.03703	98.68578	98.15173
2194	97.73861	98.35968	99.03422	98.69985	98.15746
2193	97.72827	98.3646	99.01956	98.69579	98.15688
2192	97.71796	98.35826	99.00369	98.67495	98.15026
2191	97.71859	98.34833	98.99628	98.65158	98.14945
2190	97.72719	98.33156	98.99168	98.62842	98.15118
2189	97.72976	98.30183	98.9794	98.60024	98.14124
2188	97.72337	98.27002	98.96284	98.5767	98.12386
2187	97.71724	98.25473	98.95363	98.57587	98.11712
2186	97.71575	98.25803	98.95304	98.59639	98.1215
2185	97.72077	98.27077	98.95524	98.62054	98.12419
2184	97.74446	98.29593	98.96461	98.64426	98.13205
2183	97.79537	98.34325	98.99164	98.67912	98.16559
2182	97.85486	98.40293	99.03255	98.72346	98.21967
2181	97.89162	98.44794	99.06847	98.75685	98.26321
2180	97.8971	98.46327	99.08533	98.76709	98.2795
2179	97.88483	98.45462	99.08247	98.76208	98.27741
2178	97.86356	98.43358	99.06562	98.75428	98.26742
2177	97.83721	98.41388	99.04507	98.75202	98.25787
2176	97.82083	98.4126	99.03526	98.76118	98.26601
2175	97.82648	98.43201	99.04075	98.77655	98.29802
2174	97.83872	98.44755	99.04695	98.77783	98.32538

2173	97.83155	98.4349	99.03732	98.75258	98.31518
2172	97.8035	98.4	99.01394	98.71437	98.27482
2171	97.76986	98.3613	98.9884	98.67871	98.23263
2170	97.73065	98.31596	98.96138	98.63505	98.18861
2169	97.67779	98.25139	98.92726	98.56766	98.12453
2168	97.62651	98.18027	98.89234	98.49276	98.05242
2167	97.60409	98.13294	98.87046	98.44471	98.00761
2166	97.60633	98.11668	98.86187	98.43008	97.99542
2165	97.59708	98.10889	98.85154	98.42271	97.98594
2164	97.55805	98.09199	98.83008	98.40387	97.96388
2163	97.51646	98.07556	98.80852	98.38602	97.94786
2162	97.52346	98.08901	98.81655	98.40231	97.96428
2161	97.62577	98.17258	98.89107	98.49392	98.03986
2160	97.84003	98.35657	99.04736	98.68788	98.20485
2159	98.11657	98.61239	99.24462	98.94955	98.44803
2158	98.34475	98.8408	99.4014	99.17511	98.6804
2157	98.44371	98.95489	99.46887	99.27834	98.80895
2156	98.43609	98.96022	99.46988	99.27013	98.83333
2155	98.39787	98.91983	99.45194	99.2191	98.81449
2154	98.36621	98.87338	99.43196	99.16727	98.78294
2153	98.32961	98.82397	99.40181	99.11584	98.73155
2152	98.28012	98.7747	99.36145	99.06327	98.66943
2151	98.23319	98.73795	99.3237	99.01934	98.62608
2150	98.20223	98.71621	99.29758	98.99079	98.60891
2149	98.18641	98.70305	99.28466	98.98041	98.5997
2148	98.18277	98.69883	99.28389	98.99288	98.58916
2147	98.18704	98.70373	99.28731	99.0206	98.58033
2146	98.18691	98.70392	99.28031	99.0356	98.56589
2145	98.17612	98.68785	99.25894	99.01843	98.53774
2144	98.16847	98.6683	99.23811	98.98468	98.51135
2143	98.17735	98.66555	99.23161	98.96107	98.50702
2142	98.19039	98.67745	99.23499	98.94984	98.51579
2141	98.18603	98.68692	99.23798	98.93913	98.51456
2140	98.16612	98.69051	99.24151	98.9336	98.5042
2139	98.1507	98.69845	99.25045	98.9479	98.50231
2138	98.14947	98.71463	99.26148	98.97965	98.51003
2137	98.16019	98.73711	99.27128	99.01387	98.51818
2136	98.18495	98.77005	99.28607	99.04666	98.53482
2135	98.22464	98.81374	99.30954	99.08118	98.57268
2134	98.26419	98.84977	99.33095	99.10778	98.61775
2133	98.28545	98.85685	99.33824	99.11218	98.6425
2132	98.28864	98.83601	99.33373	99.09797	98.64261
2131	98.28348	98.8037	99.32585	99.08029	98.6325
2130	98.26902	98.7688	99.31556	99.06306	98.61537
2129	98.24073	98.73299	99.30144	99.04016	98.58599
2128	98.20753	98.70307	99.2877	99.01196	98.5531
2127	98.1816	98.68451	99.27537	98.98362	98.53116
2126	98.15881	98.66935	99.25513	98.95336	98.51617
2125	98.12819	98.64729	99.22128	98.91877	98.49455
2124	98.09404	98.62299	99.18485	98.88849	98.46919
2123	98.07005	98.6072	99.16053	98.87189	98.4526
2122	98.05739	98.59755	99.14764	98.86328	98.4418
2121	98.04683	98.58408	99.13594	98.85138	98.42467
2120	98.03689	98.56732	99.12281	98.83736	98.40414
2119	98.03127	98.5546	99.11197	98.82764	98.39138
2118	98.02297	98.54376	99.10142	98.81624	98.38151
2117	98.00061	98.52718	99.08675	98.79259	98.36133
2116	97.96842	98.50717	99.07264	98.76206	98.33572
2115	97.94338	98.492	99.06844	98.7411	98.3213

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2114	97.93422	98.48158	99.07414	98.73503	98.31837
2113	97.93797	98.4721	99.08133	98.7363	98.31434
2112	97.95187	98.46871	99.0854	98.74039	98.31039
2111	97.97162	98.4764	99.08709	98.74689	98.31852
2110	97.98302	98.48462	99.08559	98.74913	98.33518
2109	97.97472	98.4793	99.08035	98.74084	98.34372
2108	97.95648	98.46552	99.07606	98.73033	98.34057
2107	97.94734	98.45955	99.0763	98.7309	98.33464
2106	97.94932	98.46281	99.07633	98.73984	98.32509
2105	97.95045	98.46318	99.07157	98.7431	98.30569
2104	97.94821	98.45828	99.06762	98.73764	98.28719
2103	97.94973	98.45732	99.07095	98.73239	98.28781
2102	97.95288	98.46174	99.07531	98.73054	98.30393
2101	97.94891	98.46366	99.06976	98.72781	98.31584
2100	97.94245	98.46311	99.05681	98.72599	98.31972
2099	97.94879	98.46895	99.0509	98.73221	98.32834
2098	97.9717	98.48352	99.06172	98.74692	98.34437
2097	98.00204	98.50209	99.08785	98.76665	98.35963
2096	98.03521	98.52462	99.12198	98.79354	98.37652
2095	98.0708	98.55072	99.15236	98.8264	98.4021
2094	98.0979	98.56759	99.16487	98.8492	98.42488
2093	98.10196	98.56185	99.15563	98.84674	98.42617
2092	98.08542	98.54039	99.13755	98.82603	98.4107
2091	98.06386	98.52183	99.12478	98.80549	98.39907
2090	98.04465	98.51127	99.11616	98.78978	98.39495
2089	98.02597	98.50069	99.1032	98.77256	98.38587
2088	98.012	98.4901	99.08713	98.7571	98.37115
2087	98.00963	98.48829	99.07559	98.75334	98.3606
2086	98.01189	98.49376	99.06802	98.75771	98.34997
2085	98.0038	98.49381	99.05768	98.75576	98.32711
2084	97.98442	98.48341	99.04479	98.74401	98.30002
2083	97.96588	98.46882	99.03561	98.73153	98.28948
2082	97.95247	98.45327	99.03075	98.72144	98.29466
2081	97.93853	98.43542	99.02532	98.70858	98.29487
2080	97.92523	98.42092	99.01908	98.69451	98.28514
2079	97.92106	98.41869	99.01628	98.68751	98.28142
2078	97.9256	98.42545	99.01769	98.68749	98.28945
2077	97.92972	98.42905	99.02168	98.6864	98.29699
2076	97.93163	98.42613	99.0299	98.6826	98.29866
2075	97.93686	98.42248	99.04354	98.68059	98.30101
2074	97.94427	98.41915	99.05756	98.68002	98.30225
2073	97.94747	98.41407	99.06702	98.67963	98.2938
2072	97.94764	98.4134	99.07383	98.68694	98.28173
2071	97.949	98.42387	99.07974	98.70712	98.28012
2070	97.94739	98.43775	99.08038	98.72745	98.2852
2069	97.93976	98.44234	99.07547	98.73073	98.2829
2068	97.93766	98.44027	99.07585	98.7198	98.27791
2067	97.95306	98.44369	99.08914	98.7117	98.28718
2066	97.97825	98.45429	99.1072	98.71373	98.30959
2065	97.99831	98.46618	99.11862	98.72281	98.33041
2064	98.01444	98.48091	99.12436	98.74036	98.34964
2063	98.03371	98.49999	99.12843	98.76698	98.37424
2062	98.04643	98.51095	99.12478	98.78909	98.39101
2061	98.03831	98.50195	99.10841	98.79149	98.38249
2060	98.01498	98.48241	99.08795	98.77767	98.3613
2059	97.99109	98.46885	99.07221	98.75995	98.35268
2058	97.9671	98.46132	99.05645	98.73967	98.35249
2057	97.94229	98.45595	99.03818	98.71775	98.34117
2056	97.93468	98.46511	99.03185	98.71047	98.32788

2055	97.95463	98.49414	99.04563	98.72645	98.3346
2054	97.97061	98.51014	99.05532	98.73819	98.34272
2053	97.93993	98.47219	99.02845	98.70921	98.30705
2052	97.87018	98.39076	98.97049	98.64656	98.22684
2051	97.8145	98.32327	98.92383	98.59718	98.15627
2050	97.80788	98.30991	98.92256	98.59346	98.13744
2049	97.83875	98.33936	98.96385	98.62538	98.16084
2048	97.88331	98.37875	99.02123	98.66574	98.19923
2047	97.93204	98.40815	99.06865	98.6976	98.24019
2046	97.97393	98.41819	99.08949	98.71241	98.27076
2045	97.99209	98.40705	99.08265	98.70922	98.27426
2044	97.98727	98.39118	99.06568	98.70173	98.25906
2043	97.97649	98.39213	99.05807	98.70338	98.25349
2042	97.9657	98.40856	99.06267	98.707	98.26507
2041	97.95201	98.42408	99.07358	98.70029	98.27924
2040	97.94734	98.43844	99.09092	98.69307	98.29564
2039	97.9651	98.46109	99.11151	98.70184	98.32287
2038	97.98936	98.48056	99.11778	98.71832	98.34269
2037	97.99382	98.47612	99.0983	98.72404	98.32928
2036	97.98712	98.45688	99.0697	98.72629	98.30237
2035	98.00009	98.45266	99.0555	98.74657	98.30856
2034	98.03237	98.46845	99.0546	98.78037	98.34986
2033	98.05514	98.48544	99.0553	98.80356	98.385
2032	98.06224	98.50228	99.06465	98.81105	98.3993
2031	98.07216	98.53309	99.0937	98.81467	98.41389
2030	98.08393	98.56902	99.12703	98.81418	98.42956
2029	98.0804	98.58561	99.13976	98.8068	98.42542
2028	98.07111	98.5861	99.13562	98.81095	98.41158
2027	98.08302	98.59473	99.13702	98.84163	98.42122
2026	98.11011	98.60985	99.14549	98.8751	98.44983
2025	98.11866	98.6065	99.14364	98.87659	98.46009
2024	98.10338	98.58461	99.1304	98.85241	98.44762
2023	98.09323	98.57191	99.12405	98.83644	98.44554
2022	98.10076	98.57828	99.13258	98.83795	98.46478
2021	98.10893	98.58594	99.14614	98.8413	98.48406
2020	98.10859	98.58503	99.15526	98.84376	98.4957
2019	98.1107	98.58371	99.15576	98.85441	98.50893
2018	98.12016	98.58464	99.14191	98.8665	98.51273
2017	98.13245	98.58524	99.11696	98.86914	98.49008
2016	98.15288	98.5963	99.10176	98.87589	98.46314
2015	98.18406	98.62378	99.11058	98.90159	98.46593
2014	98.20179	98.64033	99.12914	98.92584	98.48369
2013	98.18047	98.61295	99.13522	98.91841	98.4757
2012	98.13537	98.55432	99.12882	98.88737	98.44463
2011	98.1063	98.51197	99.12554	98.86578	98.42911
2010	98.10887	98.51168	99.13402	98.86393	98.43944
2009	98.13492	98.54491	99.15887	98.87102	98.45681
2008	98.18435	98.60114	99.208	98.88829	98.48443
2007	98.25402	98.67226	99.27184	98.91923	98.53654
2006	98.30835	98.72908	99.31143	98.94048	98.58454
2005	98.30908	98.73794	99.29631	98.92691	98.58086
2004	98.26809	98.70427	99.24278	98.89435	98.53217
2003	98.229	98.66437	99.19076	98.87786	98.48894
2002	98.20915	98.63832	99.15931	98.88139	98.47238
2001	98.19563	98.61968	99.14527	98.88309	98.46484
2000	98.18236	98.60247	99.14605	98.87577	98.46017
1999	98.17275	98.58762	99.15694	98.86708	98.46856
1998	98.15455	98.56701	99.15792	98.85194	98.47704
1997	98.11451	98.53239	99.13213	98.82152	98.45912

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1996	98.07312	98.4979	99.09315	98.79083	98.42382
1995	98.06513	98.4865	99.0716	98.7826	98.40632
1994	98.08897	98.49838	99.081	98.79276	98.41408
1993	98.10787	98.51525	99.11184	98.8014	98.42547
1992	98.10128	98.52923	99.14824	98.80899	98.43594
1991	98.08187	98.54189	99.17318	98.82699	98.4561
1990	98.06	98.54233	99.16782	98.84216	98.46789
1989	98.03312	98.52007	99.12919	98.83241	98.4417
1988	98.01033	98.49184	99.08335	98.80719	98.39226
1987	98.00758	98.48325	99.06074	98.79372	98.36357
1986	98.018	98.48957	99.06311	98.7916	98.36112
1985	98.01766	98.48439	99.07063	98.77765	98.34964
1984	97.99731	98.45918	99.07039	98.7476	98.31414
1983	97.95994	98.42363	99.05814	98.71572	98.27138
1982	97.90018	98.37796	99.02669	98.68168	98.22579
1981	97.82484	98.32214	98.97965	98.63869	98.17146
1980	97.78345	98.28609	98.94875	98.61049	98.13878
1979	97.83036	98.30991	98.96828	98.6369	98.17809
1978	97.9518	98.38972	99.0335	98.71855	98.28451
1977	98.07711	98.48019	99.10871	98.81454	98.39495
1976	98.16637	98.55274	99.172	98.89739	98.4717
1975	98.23239	98.60966	99.22323	98.96608	98.52591
1974	98.28033	98.64737	99.25817	99.01047	98.55934
1973	98.29269	98.65635	99.26989	99.01527	98.55725
1972	98.27635	98.6523	99.26843	98.99549	98.53842
1971	98.26675	98.66182	99.26927	98.98189	98.54358
1970	98.27872	98.68134	99.26905	98.97598	98.57231
1969	98.2937	98.68675	99.25655	98.95762	98.5867
1968	98.29682	98.67663	99.23913	98.92931	98.57574
1967	98.29059	98.66957	99.23464	98.91332	98.56425
1966	98.27451	98.66545	99.24355	98.91026	98.55938
1965	98.24949	98.6517	99.25342	98.90444	98.54795
1964	98.23706	98.63908	99.26118	98.90368	98.54202
1963	98.25764	98.65052	99.26966	98.93143	98.56829
1962	98.29634	98.68355	99.27561	98.98605	98.61838
1961	98.32172	98.71639	99.28064	99.04098	98.65814
1960	98.33054	98.74302	99.29869	99.0807	98.68029
1959	98.33967	98.76816	99.33164	99.10539	98.69888
1958	98.34576	98.77839	99.35343	99.10862	98.70282
1957	98.33287	98.75687	99.34108	99.08554	98.66967
1956	98.30917	98.71896	99.30743	99.05585	98.61635
1955	98.29818	98.69738	99.28159	99.04561	98.58408
1954	98.2999	98.69676	99.27009	99.05114	98.57855
1953	98.2952	98.69412	99.25982	99.04801	98.57183
1952	98.28222	98.67944	99.2475	99.02909	98.55742
1951	98.27523	98.66488	99.24203	99.00812	98.5568
1950	98.27523	98.65913	99.24439	98.994	98.57461
1949	98.27167	98.66022	99.24654	98.98749	98.59156
1948	98.26674	98.66983	99.24639	98.99401	98.59984
1947	98.27005	98.68979	99.24679	99.01461	98.60702
1946	98.2759	98.70878	99.24531	99.03215	98.60858
1945	98.27298	98.71473	99.24019	99.03012	98.59401
1944	98.26864	98.71452	99.23943	99.01718	98.57589
1943	98.27575	98.72011	99.24838	99.01158	98.57582
1942	98.28311	98.72408	99.25593	99.01136	98.58446
1941	98.27356	98.71608	99.25182	99.00694	98.57817
1940	98.25935	98.70852	99.24568	99.00755	98.56513
1939	98.26408	98.71636	99.25119	99.02407	98.56884
1938	98.28554	98.73021	99.26625	99.04339	98.58506

1937	98.30386	98.73245	99.28143	99.04545	98.59216
1936	98.31526	98.72731	99.29585	99.03504	98.59121
1935	98.33024	98.72972	99.31062	99.03119	98.59875
1934	98.3443	98.73523	99.31721	99.03534	98.60911
1933	98.34193	98.72952	99.31009	99.03621	98.6034
1932	98.3252	98.7178	99.30058	99.03539	98.58835
1931	98.30927	98.7155	99.30089	99.04055	98.58649
1930	98.29703	98.71948	99.30377	99.04249	98.59445
1929	98.28171	98.71534	99.29557	99.02786	98.59052
1928	98.2693	98.70624	99.28096	99.00637	98.5769
1927	98.27245	98.70693	99.27463	98.99811	98.5742
1926	98.28699	98.71602	99.27775	99.00238	98.581
1925	98.29851	98.7213	99.28022	99.00463	98.57713
1924	98.30277	98.72313	99.2787	99.00484	98.56254
1923	98.30101	98.72828	99.27626	99.01265	98.55605
1922	98.28514	98.72714	99.26915	99.0205	98.55634
1921	98.25114	98.70656	99.25275	99.01234	98.54482
1920	98.21789	98.67758	99.23519	98.99326	98.52496
1919	98.20913	98.66453	99.22997	98.98384	98.51964
1918	98.22191	98.67135	99.23772	98.99027	98.53239
1917	98.23483	98.68058	99.24746	99.00037	98.54354
1916	98.24316	98.68589	99.25401	99.00851	98.54849
1915	98.25541	98.69391	99.2585	99.01729	98.55787
1914	98.26651	98.69998	99.2577	99.02111	98.56612
1913	98.26558	98.69318	99.25018	99.01365	98.55835
1912	98.26082	98.68035	99.24603	99.00568	98.54297
1911	98.26999	98.6797	99.2554	99.01255	98.54423
1910	98.28933	98.69067	99.27027	99.0273	98.56161
1909	98.29656	98.69394	99.27314	99.03013	98.57041
1908	98.28673	98.68433	99.26224	99.02123	98.56473
1907	98.27633	98.67677	99.25075	99.01663	98.56214
1906	98.27299	98.67796	99.246	99.01739	98.56622
1905	98.27059	98.67951	99.24523	99.01066	98.56236
1904	98.26764	98.67704	99.24636	98.99638	98.55016
1903	98.26829	98.67482	99.24936	98.98663	98.5452
1902	98.2684	98.67112	99.24961	98.98197	98.54853
1901	98.25976	98.65842	99.24315	98.97262	98.54579
1900	98.24816	98.64024	99.23557	98.9614	98.53714
1899	98.247	98.62935	99.23417	98.96171	98.53744
1898	98.25509	98.62873	99.23609	98.97345	98.54666
1897	98.26058	98.6314	99.23433	98.98225	98.54937
1896	98.26131	98.63609	99.23061	98.98365	98.54496
1895	98.26248	98.64569	99.23095	98.98706	98.54862
1894	98.2595	98.65314	99.23267	98.99406	98.55938
1893	98.24491	98.64861	99.22943	98.99493	98.55968
1892	98.22717	98.63773	99.224	98.98803	98.54726
1891	98.22214	98.63424	99.22358	98.9822	98.53759
1890	98.22877	98.63768	99.22647	98.98012	98.53574
1889	98.23264	98.63563	99.22479	98.97589	98.53079
1888	98.23263	98.62886	99.21863	98.97091	98.52207
1887	98.23934	98.62975	99.21457	98.97288	98.52074
1886	98.25134	98.6384	99.21417	98.97994	98.52552
1885	98.25769	98.64371	99.21513	98.98276	98.5254
1884	98.258	98.64378	99.21794	98.9803	98.52336
1883	98.26079	98.64675	99.22293	98.97907	98.53191
1882	98.26554	98.65245	99.22559	98.97866	98.54626
1881	98.26427	98.65141	99.22334	98.97348	98.54923
1880	98.25852	98.64255	99.22164	98.9661	98.54066
1879	98.2561	98.63483	99.22444	98.96387	98.53607

1878	98.25388	98.63096	99.22632	98.96549	98.53826
1877	98.24441	98.62706	99.22308	98.96553	98.53685
1876	98.23438	98.62642	99.22168	98.96788	98.53387
1875	98.23486	98.63555	99.22943	98.97888	98.54179
1874	98.23978	98.64858	99.24093	98.99142	98.55678
1873	98.23573	98.65298	99.24696	98.99317	98.56175
1872	98.2276	98.64942	99.24924	98.98644	98.55544
1871	98.23453	98.65033	99.25469	98.984	98.55282
1870	98.26001	98.65909	99.26045	98.98776	98.55652
1869	98.28368	98.66486	99.25798	98.98734	98.55206
1868	98.29267	98.66334	99.25097	98.98208	98.53973
1867	98.29514	98.66196	99.24888	98.98104	98.53602
1866	98.29471	98.66059	99.24932	98.98244	98.53949
1865	98.28586	98.65254	99.24562	98.97887	98.53481
1864	98.27193	98.64088	99.24029	98.97361	98.52157
1863	98.26271	98.6353	99.23946	98.97514	98.51333
1862	98.25804	98.63606	99.24129	98.9813	98.51339
1861	98.25105	98.63569	99.23967	98.98301	98.5131
1860	98.24559	98.6352	99.2358	98.98119	98.51287
1859	98.25152	98.6422	99.23495	98.98413	98.52128
1858	98.26519	98.65437	99.23581	98.9907	98.53344
1857	98.27315	98.66115	99.23389	98.99254	98.53508
1856	98.27416	98.66115	99.2313	98.99007	98.52802
1855	98.2778	98.66194	99.23281	98.99084	98.52752
1854	98.28465	98.66415	99.2369	98.99435	98.53523
1853	98.28562	98.66184	99.23965	98.99447	98.53884
1852	98.28008	98.65619	99.24285	98.99234	98.53616
1851	98.27743	98.65418	99.2477	98.99229	98.53531
1850	98.27739	98.65364	99.24775	98.99027	98.53529
1849	98.26925	98.64703	99.23877	98.98017	98.52837
1848	98.25223	98.6382	99.22926	98.96879	98.52092
1847	98.23905	98.63897	99.23013	98.96825	98.52674
1846	98.23836	98.6491	99.23872	98.97696	98.5406
1845	98.24673	98.65492	99.24374	98.98214	98.54189
1844	98.26037	98.65186	99.24357	98.98167	98.53025
1843	98.27784	98.65051	99.24441	98.98461	98.52603
1842	98.29054	98.65375	99.24423	98.98879	98.52881
1841	98.29096	98.65488	99.23906	98.9867	98.52367
1840	98.28704	98.65531	99.23426	98.983	98.51339
1839	98.29162	98.66274	99.23695	98.98787	98.51354
1838	98.30257	98.67427	99.24487	98.99928	98.52408
1837	98.30829	98.67826	99.25023	99.00543	98.52789
1836	98.308	98.67314	99.25222	99.00406	98.5211
1835	98.30787	98.66803	99.25476	99.0022	98.51699
1834	98.30337	98.66516	99.25598	99.00031	98.51894
1833	98.28693	98.65988	99.25181	98.99364	98.51658
1832	98.26904	98.65608	99.24517	98.98442	98.50735
1831	98.27022	98.66379	99.24205	98.97911	98.50068
1830	98.28442	98.67619	99.241	98.97546	98.49891
1829	98.28491	98.67387	99.2364	98.96688	98.49283
1828	98.27193	98.65976	99.23048	98.95852	98.48511
1827	98.26837	98.65277	99.22915	98.95824	98.48703
1826	98.27862	98.656	99.23101	98.96016	98.49312
1825	98.28465	98.65565	99.23136	98.95309	98.48548
1824	98.27863	98.64649	99.23167	98.942	98.46482
1823	98.27279	98.6389	99.23501	98.94032	98.44954
1822	98.27299	98.63779	99.23767	98.94608	98.44388
1821	98.27336	98.63886	99.23612	98.94834	98.43862
1820	98.27627	98.64363	99.23518	98.94753	98.43461

ACCEPTED MANUSCRIPT

1819	98.29135	98.65875	99.24074	98.95394	98.44213
1818	98.31403	98.67975	99.24884	98.9675	98.45766
1817	98.32627	98.69185	99.25106	98.97496	98.4637
1816	98.32043	98.68866	99.24761	98.96949	98.45524
1815	98.30558	98.67679	99.24397	98.95594	98.44214
1814	98.28837	98.66143	99.23899	98.9375	98.42636
1813	98.26622	98.64224	99.22809	98.91245	98.39973
1812	98.2415	98.62262	99.21324	98.88392	98.36334
1811	98.2208	98.60622	99.20031	98.85923	98.32825
1810	98.20178	98.58654	99.18823	98.83718	98.29231
1809	98.17745	98.55608	99.17192	98.81079	98.24211
1808	98.14801	98.51993	99.15274	98.78032	98.17774
1807	98.11588	98.48653	99.13391	98.74922	98.10888
1806	98.07469	98.45139	99.11143	98.71298	98.03088
1805	98.01701	98.40193	99.0795	98.66482	97.9268
1804	97.94593	98.33405	99.03929	98.60841	97.78973
1803	97.86819	98.25245	98.99437	98.55293	97.62389
1802	97.77991	98.15936	98.94249	98.49983	97.43128
1801	97.67738	98.05824	98.88422	98.44604	97.22261
1800	97.58015	97.96669	98.83197	98.39615	97.03346
1799	97.51386	97.90263	98.79635	98.35747	96.8984
1798	97.47893	97.86459	98.77303	98.32846	96.81841
1797	97.45673	97.83916	98.75339	98.30565	96.77388
1796	97.43574	97.8198	98.73744	98.29301	96.75274
1795	97.42327	97.81195	98.72996	98.29592	96.75792
1794	97.43634	97.82674	98.73209	98.31261	96.80139
1793	97.48925	97.87567	98.74411	98.33854	96.90075
1792	97.58224	97.96155	98.76873	98.37519	97.06378
1791	97.69257	98.06572	98.80084	98.4221	97.26259
1790	97.79093	98.16223	98.82769	98.46775	97.45164
1789	97.8659	98.23918	98.84589	98.50378	97.608
1788	97.92544	98.29924	98.86382	98.53392	97.73524
1787	97.9819	98.34968	98.8881	98.56444	97.84495
1786	98.03478	98.39207	98.91479	98.59344	97.93969
1785	98.07258	98.42273	98.93576	98.61536	98.01328
1784	98.09238	98.44366	98.95099	98.63333	98.06746
1783	98.10691	98.46368	98.96599	98.65368	98.11266
1782	98.12542	98.48654	98.9817	98.67453	98.15208
1781	98.14181	98.50726	98.99791	98.69162	98.18169
1780	98.15146	98.52374	99.01799	98.70852	98.20373
1779	98.15856	98.53832	99.04215	98.73058	98.22696
1778	98.16378	98.54921	99.06346	98.75236	98.25092
1777	98.15944	98.55145	99.0772	98.76618	98.26894
1776	98.1431	98.54805	99.08888	98.77508	98.2828
1775	98.12623	98.55012	99.10536	98.78735	98.30046
1774	98.12056	98.56187	99.12365	98.80126	98.32017
1773	98.1234	98.57358	99.13581	98.80496	98.32949
1772	98.12837	98.57592	99.14453	98.79859	98.32928
1771	98.13833	98.5726	99.15589	98.79542	98.33357
1770	98.15148	98.56786	99.16366	98.79416	98.33871
1769	98.15891	98.56027	99.1608	98.78742	98.33324
1768	98.15846	98.55236	99.15238	98.78205	98.32351
1767	98.15426	98.54974	99.14752	98.78811	98.32382
1766	98.14531	98.55037	99.14612	98.79947	98.33119
1765	98.12863	98.54814	99.14351	98.80348	98.33221
1764	98.11175	98.54519	99.14181	98.80015	98.32627
1763	98.10859	98.54832	99.14667	98.79883	98.32498
1762	98.11655	98.5528	99.15489	98.80042	98.33017
1761	98.1173	98.54545	99.15672	98.7968	98.3293

1760	98.10833	98.53059	99.15125	98.78941	98.32048
1759	98.10221	98.5227	99.14543	98.78683	98.31479
1758	98.10307	98.52448	99.14091	98.78794	98.31283
1757	98.09995	98.52575	99.13516	98.78529	98.30652
1756	98.08711	98.52136	99.13103	98.77997	98.29827
1755	98.07378	98.51707	99.13161	98.77838	98.29749
1754	98.06447	98.51311	99.13236	98.77742	98.29999
1753	98.05386	98.50301	99.12765	98.77045	98.29301
1752	98.04324	98.4901	99.12104	98.76229	98.2767
1751	98.04484	98.49051	99.12275	98.76653	98.26813
1750	98.05857	98.50551	99.13246	98.781	98.27249
1749	98.06655	98.51498	99.13817	98.78717	98.27292
1748	98.06104	98.5097	99.13765	98.78256	98.26585
1747	98.05248	98.49987	99.13754	98.77957	98.26271
1746	98.0457	98.49196	99.13787	98.7812	98.26267
1745	98.03424	98.48288	99.13607	98.78147	98.25596
1744	98.01762	98.4746	99.13605	98.78172	98.24656
1743	98.00164	98.47346	99.14226	98.78862	98.24906
1742	97.98533	98.47625	99.1486	98.79677	98.26081
1741	97.96469	98.47248	99.14491	98.79269	98.26287
1740	97.94398	98.46027	99.13435	98.77794	98.25171
1739	97.92675	98.44599	99.13016	98.76931	98.24425
1738	97.90281	98.4301	99.13361	98.76954	98.2438
1737	97.86434	98.40848	99.13497	98.76608	98.23679
1736	97.82483	98.38522	99.13016	98.75457	98.21949
1735	97.81043	98.37288	99.12162	98.7408	98.2039
1734	97.8163	98.37109	99.11385	98.72556	98.19617
1733	97.81076	98.36068	99.10835	98.70726	98.18357
1732	97.79292	98.34453	99.10415	98.69351	98.16679
1731	97.77986	98.33629	99.10188	98.68992	98.15789
1730	97.76955	98.33379	99.09827	98.69033	98.15365
1729	97.74847	98.32557	99.08828	98.68502	98.14273
1728	97.71683	98.31141	99.07527	98.67444	98.12736
1727	97.68941	98.30067	99.06532	98.66503	98.11806
1726	97.66878	98.29326	99.05667	98.65634	98.11338
1725	97.64393	98.28089	99.04428	98.6431	98.10248
1724	97.6124	98.26415	99.03025	98.62843	98.08681
1723	97.57903	98.25019	99.02209	98.62183	98.08125
1722	97.53918	98.23671	99.0201	98.62114	98.08679
1721	97.48584	98.21587	99.01755	98.61515	98.08816
1720	97.43041	98.19173	99.01184	98.60107	98.07808
1719	97.39672	98.17783	99.00527	98.5864	98.06528
1718	97.38082	98.17164	98.99762	98.57184	98.05494
1717	97.35314	98.1532	98.98693	98.54962	98.03638
1716	97.31407	98.12462	98.97724	98.52584	98.01135
1715	97.28355	98.10299	98.97167	98.51119	97.99562
1714	97.25885	98.08659	98.96497	98.49947	97.98557
1713	97.22822	98.06554	98.95291	98.48102	97.96824
1712	97.19358	98.0424	98.9401	98.46036	97.94809
1711	97.16274	98.02566	98.93221	98.44719	97.93867
1710	97.13083	98.01275	98.92642	98.44045	97.93891
1709	97.08539	97.99313	98.91711	98.43221	97.93565
1708	97.03134	97.96764	98.90537	98.42057	97.92461
1707	96.98862	97.94869	98.89483	98.40763	97.91253
1706	96.95557	97.93547	98.8832	98.38821	97.89935
1705	96.90587	97.91078	98.86917	98.35783	97.87814
1704	96.83403	97.87248	98.86022	98.32788	97.85641
1703	96.75915	97.83512	98.86029	98.30921	97.84706
1702	96.69464	97.80225	98.85969	98.29714	97.84537

1701	96.63392	97.76388	98.84229	98.27319	97.82625
1700	96.57382	97.72116	98.81916	98.2358	97.78595
1699	96.53555	97.69416	98.81205	98.20897	97.757
1698	96.51617	97.68041	98.80649	98.18334	97.73567
1697	96.48519	97.65736	98.78274	98.13502	97.69539
1696	96.42971	97.61764	98.74852	98.07371	97.644
1695	96.36763	97.57541	98.72249	98.0314	97.61276
1694	96.3142	97.53994	98.70276	98.00856	97.5984
1693	96.26169	97.50621	98.67748	97.98378	97.57664
1692	96.20706	97.4728	98.6495	97.95109	97.54214
1691	96.15246	97.44243	98.62686	97.91776	97.5068
1690	96.09056	97.41007	98.60924	97.88411	97.47513
1689	96.00918	97.36776	98.59148	97.84532	97.44182
1688	95.917	97.32345	98.57748	97.80739	97.41115
1687	95.83506	97.29342	98.57202	97.78044	97.3936
1686	95.76685	97.27475	98.56671	97.75896	97.38188
1685	95.68327	97.23907	98.53893	97.71496	97.34227
1684	95.56941	97.16583	98.49508	97.64987	97.27818
1683	95.48077	97.0886	98.46434	97.60705	97.23932
1682	95.44027	97.03528	98.43747	97.57764	97.21441
1681	95.40726	96.99082	98.40081	97.53701	97.17549
1680	95.35874	96.9434	98.36619	97.49242	97.13147
1679	95.29885	96.89678	98.34678	97.46089	97.10375
1678	95.2347	96.85088	98.33851	97.43798	97.08857
1677	95.16369	96.79654	98.32356	97.40322	97.06205
1676	95.08703	96.73344	98.29357	97.34962	97.01681
1675	95.0204	96.67801	98.25958	97.29527	96.97429
1674	94.96976	96.63648	98.23151	97.25247	96.94364
1673	94.91782	96.59425	98.20427	97.20947	96.90813
1672	94.85476	96.54465	98.17422	97.15826	96.86296
1671	94.78797	96.49404	98.14375	97.10313	96.82103
1670	94.71933	96.44236	98.10962	97.04187	96.78255
1669	94.64417	96.37977	98.06864	96.97017	96.73143
1668	94.57595	96.31632	98.03031	96.90424	96.67506
1667	94.5286	96.27011	98.00287	96.86042	96.63531
1666	94.48794	96.23518	97.98046	96.82922	96.60793
1665	94.43363	96.19487	97.95327	96.78949	96.57208
1664	94.36315	96.146	97.92002	96.73278	96.52219
1663	94.29101	96.09908	97.88963	96.67003	96.47572
1662	94.22748	96.05612	97.86425	96.6117	96.43918
1661	94.16635	96.00705	97.8349	96.55335	96.39498
1660	94.10376	95.95459	97.80025	96.49478	96.34071
1659	94.04672	95.91106	97.76905	96.44667	96.29445
1658	93.99052	95.87744	97.74577	96.41248	96.26386
1657	93.92373	95.84406	97.73212	96.38405	96.23945
1656	93.84427	95.8097	97.72632	96.35539	96.21452
1655	93.77226	95.78566	97.72348	96.32807	96.19493
1654	93.69728	95.76429	97.69118	96.27608	96.16397
1653	93.58053	95.70116	97.62234	96.16759	96.08408
1652	93.49017	95.62278	97.57652	96.07552	95.9998
1651	93.47015	95.58652	97.56533	96.04386	95.96598
1650	93.46408	95.57183	97.55846	96.03299	95.95627
1649	93.43816	95.55279	97.53954	96.00322	95.92761
1648	93.38034	95.51914	97.50038	95.94128	95.86767
1647	93.30168	95.47893	97.45456	95.86977	95.80933
1646	93.23008	95.43826	97.41971	95.81719	95.77397
1645	93.1763	95.39367	97.39353	95.77716	95.73615
1644	93.13641	95.35182	97.37094	95.74328	95.69449
1643	93.10557	95.31892	97.35365	95.71738	95.66477

1642	93.0751	95.29001	97.33716	95.69387	95.64386
1641	93.0305	95.25486	97.31719	95.66661	95.61885
1640	92.9727	95.21713	97.30099	95.64165	95.59233
1639	92.91828	95.19212	97.29701	95.62963	95.57915
1638	92.87192	95.18077	97.29894	95.62408	95.57604
1637	92.81065	95.16111	97.28621	95.6014	95.55766
1636	92.71929	95.1188	97.25777	95.55746	95.5229
1635	92.64157	95.08016	97.24008	95.52801	95.50945
1634	92.60871	95.06396	97.23622	95.52073	95.51192
1633	92.59113	95.05712	97.23043	95.51432	95.50106
1632	92.56466	95.05046	97.22437	95.50691	95.48113
1631	92.53037	95.04828	97.22572	95.50874	95.47261
1630	92.48868	95.0515	97.23197	95.51968	95.4797
1629	92.43123	95.05313	97.23543	95.53057	95.48876
1628	92.36103	95.05237	97.23896	95.54438	95.49816
1627	92.29936	95.05768	97.25122	95.57235	95.5207
1626	92.25235	95.06852	97.26825	95.60821	95.55051
1625	92.20154	95.07578	97.28046	95.637	95.56829
1624	92.13754	95.08248	97.29041	95.66292	95.57705
1623	92.07866	95.09996	97.30822	95.70404	95.59981
1622	92.04165	95.12142	97.33059	95.75489	95.63151
1621	92.01603	95.13249	97.34859	95.79522	95.64845
1620	91.99341	95.1398	97.36624	95.82616	95.65465
1619	91.98548	95.16182	97.39128	95.86386	95.67152
1618	92.00302	95.20276	97.42026	95.91614	95.70503
1617	92.03511	95.24128	97.4449	95.97464	95.73784
1616	92.06937	95.26008	97.47031	96.03452	95.76517
1615	92.11282	95.27302	97.50178	96.0981	95.79927
1614	92.16247	95.29032	97.53072	96.15684	95.83027
1613	92.20356	95.30678	97.55234	96.20336	95.84183
1612	92.23379	95.32248	97.57286	96.24668	95.84318
1611	92.26303	95.34446	97.59713	96.29896	95.85646
1610	92.29421	95.37094	97.61921	96.35551	95.88113
1609	92.31748	95.39083	97.63407	96.40451	95.89775
1608	92.33183	95.40377	97.65026	96.45035	95.90669
1607	92.34915	95.4189	97.67535	96.50241	95.92335
1606	92.37046	95.43455	97.70132	96.55237	95.94142
1605	92.38266	95.44155	97.7194	96.58858	95.94391
1604	92.38481	95.44457	97.73466	96.61849	95.9383
1603	92.39127	95.45652	97.75374	96.65676	95.94582
1602	92.40485	95.47441	97.77165	96.70001	95.96231
1601	92.41288	95.48406	97.78284	96.7353	95.96587
1600	92.41222	95.48548	97.79335	96.76434	95.95761
1599	92.41325	95.4894	97.80799	96.79489	95.95461
1598	92.41704	95.4947	97.81885	96.82095	95.95366
1597	92.41354	95.49217	97.81908	96.83333	95.93834
1596	92.40291	95.48555	97.81586	96.84005	95.91401
1595	92.39649	95.48609	97.81754	96.85465	95.90012
1594	92.39507	95.49	97.81915	96.87247	95.89226
1593	92.38806	95.48453	97.81496	96.88134	95.87062
1592	92.37532	95.47251	97.8114	96.88523	95.83903
1591	92.36702	95.46655	97.81349	96.89415	95.81633
1590	92.3634	95.46578	97.81287	96.9035	95.79972
1589	92.35604	95.45984	97.8025	96.90472	95.77321
1588	92.34824	95.45123	97.78957	96.90422	95.74343
1587	92.35105	95.45039	97.78089	96.91083	95.72908
1586	92.36173	95.45443	97.77028	96.9166	95.72378
1585	92.36699	95.45296	97.75286	96.91207	95.70748
1584	92.36648	95.44951	97.73684	96.90617	95.68511

1583	92.3732	95.4557	97.7268	96.90968	95.67571
1582	92.38724	95.46723	97.71227	96.91487	95.67552
1581	92.39415	95.47111	97.68725	96.91043	95.66701
1580	92.39212	95.47161	97.66325	96.90287	95.65518
1579	92.39625	95.48525	97.64866	96.90215	95.65766
1578	92.41312	95.51211	97.6299	96.89998	95.66927
1577	92.42807	95.53071	97.58538	96.87832	95.66248
1576	92.43302	95.53021	97.52662	96.84751	95.6392
1575	92.44415	95.52472	97.48329	96.83441	95.63099
1574	92.46167	95.51811	97.45182	96.82929	95.62989
1573	92.46922	95.50354	97.41874	96.81448	95.61349
1572	92.46914	95.48711	97.3849	96.79466	95.58798
1571	92.47643	95.4819	97.3469	96.77778	95.57048
1570	92.48852	95.48383	97.29055	96.75009	95.54966
1569	92.4872	95.47195	97.22061	96.70084	95.50101
1568	92.48141	95.45138	97.16487	96.65211	95.44308
1567	92.49139	95.44142	97.12727	96.61761	95.4034
1566	92.50804	95.43541	97.08365	96.57999	95.36862
1565	92.50924	95.4173	97.02434	96.52622	95.31576
1564	92.49326	95.39271	96.96919	96.47571	95.26061
1563	92.47783	95.38037	96.94491	96.45034	95.23366
1562	92.46848	95.37883	96.9391	96.44094	95.22847
1561	92.45512	95.36917	96.92031	96.41919	95.20508
1560	92.43195	95.34056	96.82144	96.34233	95.1153
1559	92.37617	95.28928	96.62105	96.18772	94.97892
1558	92.31079	95.21141	96.44446	96.03623	94.87142
1557	92.27867	95.13054	96.33507	95.91164	94.75614
1556	92.26822	95.06907	96.23484	95.79536	94.63156
1555	92.25879	95.02156	96.11521	95.67513	94.513
1554	92.23222	94.96578	95.9665	95.53703	94.38576
1553	92.18076	94.88689	95.80626	95.38188	94.23259
1552	92.11826	94.79437	95.64723	95.22075	94.05864
1551	92.04926	94.69472	95.47237	95.04768	93.86425
1550	91.95438	94.57563	95.26489	94.84615	93.63184
1549	91.8296	94.43632	95.05255	94.63118	93.36925
1548	91.70493	94.30145	94.8778	94.44161	93.11969
1547	91.59963	94.1808	94.7327	94.27959	92.89457
1546	91.49254	94.04882	94.56829	94.10302	92.64848
1545	91.34918	93.88031	94.356	93.88018	92.34047
1544	91.18217	93.70051	94.13806	93.64645	92.01506
1543	91.03717	93.55673	93.96243	93.45408	91.74574
1542	90.91083	93.42838	93.78981	93.26262	91.48411
1541	90.72705	93.2284	93.5081	92.95977	91.07447
1540	90.46726	92.9402	93.12435	92.5545	90.51747
1539	90.25014	92.6839	92.81247	92.22501	90.05247
1538	90.12371	92.50657	92.63121	92.01237	89.73946
1537	90.02784	92.36477	92.51347	91.84623	89.48398
1536	89.92619	92.22764	92.40885	91.68115	89.22691
1535	89.79843	92.06858	92.26237	91.4748	88.9196
1534	89.60859	91.84596	92.01429	91.17342	88.50069
1533	89.36502	91.56878	91.70348	90.80603	88.00379
1532	89.15126	91.32414	91.45243	90.49084	87.56934
1531	88.99912	91.14349	91.28463	90.25595	87.23414
1530	88.85944	90.97845	91.13344	90.03668	86.91954
1529	88.68643	90.78137	90.94815	89.77751	86.55254
1528	88.4745	90.54748	90.71979	89.47343	86.12606
1527	88.24374	90.29896	90.4628	89.15009	85.67907
1526	88.00622	90.04964	90.19671	88.82862	85.23959
1525	87.77297	89.80831	89.95456	88.52728	84.82056

1524	87.55854	89.58549	89.74972	88.25258	84.42823
1523	87.34515	89.35663	89.52531	87.95594	84.01714
1522	87.06581	89.05808	89.18356	87.55308	83.49499
1521	86.73043	88.70635	88.77715	87.0917	82.90414
1520	86.45814	88.42201	88.47833	86.73873	82.43062
1519	86.27116	88.21878	88.28436	86.48868	82.08027
1518	86.06621	87.99349	88.04796	86.19832	81.69226
1517	85.77027	87.67812	87.69744	85.7944	81.17391
1516	85.44554	87.34168	87.33119	85.37571	80.63662
1515	85.18704	87.07547	87.06068	85.04626	80.2079
1514	84.97377	86.85364	86.85088	84.76434	79.83891
1513	84.74477	86.61509	86.63333	84.46121	79.44014
1512	84.49715	86.36022	86.40399	84.14403	79.01622
1511	84.27138	86.1306	86.20571	83.86019	78.63037
1510	84.07347	85.93142	86.0457	83.61018	78.28782
1509	83.85142	85.70847	85.87316	83.33145	77.90741
1508	83.51106	85.37844	85.57363	82.93372	77.3809
1507	83.00671	84.91296	85.08345	82.39247	76.70347
1506	82.5153	84.46162	84.61217	81.88774	76.07972
1505	82.20602	84.15089	84.34945	81.54881	75.6243
1504	82.02727	83.94448	84.22955	81.32322	75.28557
1503	81.88112	83.76782	84.14927	81.12926	74.98878
1502	81.70259	83.56555	84.04498	80.90671	74.66582
1501	81.46578	83.31705	83.89639	80.63725	74.28514
1500	81.19982	83.04943	83.72789	80.35071	73.87818
1499	80.94232	82.79339	83.55417	80.0696	73.48286
1498	80.66494	82.51643	83.33753	79.752	73.05594
1497	80.31597	82.17319	83.04918	79.3625	72.54008
1496	79.95141	81.82089	82.76597	78.9809	72.01943
1495	79.66582	81.54294	82.57475	78.69317	71.60992
1494	79.45051	81.32121	82.46034	78.46684	71.27908
1493	79.24653	81.09944	82.36806	78.23846	70.94024
1492	79.0222	80.85438	82.25877	77.98246	70.5584
1491	78.75565	80.57824	82.09095	77.6849	70.13025
1490	78.4229	80.25572	81.84274	77.33183	69.64825
1489	78.05905	79.90899	81.57657	76.96481	69.14465
1488	77.74481	79.60053	81.37716	76.65454	68.69424
1487	77.49429	79.34428	81.24238	76.40081	68.3113
1486	77.2644	79.1058	81.12862	76.15678	67.94366
1485	77.03541	78.86894	81.02633	75.90858	67.56254
1484	76.81757	78.64433	80.94474	75.67317	67.18565
1483	76.60524	78.42637	80.86553	75.4447	66.81662
1482	76.36398	78.18428	80.75438	75.19423	66.42426
1481	76.09162	77.91696	80.62277	74.92821	66.00645
1480	75.83912	77.67068	80.52346	74.69394	65.61767
1479	75.63242	77.46499	80.47008	74.50041	65.28028
1478	75.42977	77.25866	80.41898	74.30052	64.9409
1477	75.18923	77.01381	80.34074	74.06454	64.5518
1476	74.93375	76.75653	80.2623	73.82828	64.15079
1475	74.69848	76.52226	80.20725	73.62298	63.78626
1474	74.43668	76.26848	80.12515	73.40077	63.39567
1473	74.08442	75.93719	79.96594	73.11838	62.89485
1472	73.72367	75.59787	79.80535	72.85416	62.37712
1471	73.47359	75.3487	79.74049	72.68184	61.97461
1470	73.30818	75.16389	79.75388	72.55932	61.64765
1469	73.15669	74.98699	79.79636	72.44079	61.32095
1468	72.99717	74.8041	79.84659	72.32472	60.98358
1467	72.8197	74.60948	79.88069	72.20759	60.63712
1466	72.58723	74.37019	79.85531	72.05622	60.23949

1465	72.28212	74.07291	79.75861	71.86051	59.76746
1464	71.98353	73.78749	79.66176	71.68091	59.30836
1463	71.77285	73.57664	79.63143	71.56069	58.94371
1462	71.62487	73.41272	79.65441	71.47052	58.63615
1461	71.48581	73.24972	79.69736	71.37709	58.32238
1460	71.33342	73.07776	79.73821	71.2784	57.98825
1459	71.14937	72.88587	79.73952	71.16606	57.62384
1458	70.84141	72.60018	79.60681	70.98589	57.14411
1457	70.38355	72.19154	79.33999	70.73637	56.52031
1456	69.99932	71.84303	79.14938	70.56029	55.97922
1455	69.80867	71.64839	79.12806	70.49603	55.62265
1454	69.68819	71.50572	79.17339	70.45549	55.31291
1453	69.54094	71.33934	79.21032	70.39596	54.95506
1452	69.36793	71.15909	79.23218	70.33901	54.57511
1451	69.20011	70.99177	79.2555	70.30327	54.22245
1450	69.02527	70.8179	79.2744	70.26649	53.87034
1449	68.81049	70.60642	79.27183	70.20925	53.46747
1448	68.57299	70.37937	79.25834	70.15469	53.04262
1447	68.36096	70.18176	79.26275	70.12569	52.66141
1446	68.18301	70.01198	79.29311	70.10498	52.31488
1445	68.01695	69.84758	79.33966	70.07834	51.96367
1444	67.85874	69.6912	79.39621	70.05846	51.61388
1443	67.71022	69.548	79.45631	70.05246	51.28258
1442	67.55803	69.40283	79.51174	70.0449	50.95258
1441	67.40178	69.2516	79.56821	70.02879	50.61399
1440	67.26723	69.11785	79.6404	70.01866	50.29816
1439	67.157	69.00527	79.71802	70.01457	50.01475
1438	67.00862	68.86221	79.74813	69.98272	49.69551
1437	66.76061	68.64468	79.68722	69.90397	49.27593
1436	66.49037	68.42156	79.59709	69.83164	48.84316
1435	66.31704	68.27786	79.57204	69.80708	48.50299
1434	66.21798	68.17928	79.6065	69.79477	48.2012
1433	66.12022	68.07042	79.65121	69.765	47.86343
1432	66.00597	67.94984	79.6828	69.72964	47.49844
1431	65.88457	67.83391	79.69533	69.70264	47.14063
1430	65.74945	67.71231	79.68675	69.67092	46.77595
1429	65.60401	67.58272	79.67044	69.62949	46.3929
1428	65.49257	67.48346	79.67894	69.60421	46.04412
1427	65.43754	67.43292	79.7226	69.60349	45.75841
1426	65.39902	67.39482	79.77005	69.59925	45.47885
1425	65.32825	67.33601	79.78778	69.57701	45.15404
1424	65.24134	67.28254	79.79184	69.56801	44.83221
1423	65.1932	67.27403	79.83189	69.59834	44.58253
1422	65.18747	67.2919	79.91724	69.64098	44.36886
1421	65.1833	67.29859	80.0064	69.66567	44.12061
1420	65.15864	67.29939	80.05168	69.68735	43.84924
1419	65.12549	67.32667	80.05003	69.74045	43.62444
1418	65.10727	67.37864	80.05783	69.81866	43.44394
1417	65.12583	67.44596	80.11936	69.90272	43.269
1416	65.19986	67.55131	80.23096	70.00708	43.13178
1415	65.32461	67.70331	80.37083	70.14102	43.0593
1414	65.46999	67.8779	80.51846	70.28927	43.01625
1413	65.62022	68.06228	80.66829	70.44756	42.97957
1412	65.79485	68.27913	80.83064	70.63974	42.99798
1411	66.00938	68.54288	81.01346	70.87798	43.11488
1410	66.24371	68.82803	81.21245	71.13842	43.29064
1409	66.48207	69.11458	81.42493	71.40412	43.48273
1408	66.74305	69.4205	81.6569	71.69265	43.72869
1407	67.04271	69.76355	81.90784	72.02134	44.08038

1406	67.36467	70.13224	82.16398	72.38348	44.52723
1405	67.68652	70.50923	82.41646	72.77071	45.03224
1404	68.00499	70.88529	82.6704	73.17591	45.56852
1403	68.31088	71.23655	82.92715	73.56889	46.07811
1402	68.58191	71.53743	83.17792	73.92386	46.49771
1401	68.81707	71.79969	83.41777	74.26485	46.8482
1400	69.04561	72.06583	83.65068	74.64703	47.22877
1399	69.29169	72.35611	83.88356	75.0818	47.68481
1398	69.5533	72.65116	84.12456	75.52021	48.14604
1397	69.83867	72.95798	84.38592	75.9509	48.59947
1396	70.18304	73.32897	84.67727	76.42832	49.17526
1395	70.59585	73.78487	84.99098	76.97719	49.95927
1394	71.03379	74.27054	85.30821	77.5389	50.83546
1393	71.46458	74.73657	85.62364	78.05823	51.66367
1392	71.89906	75.19166	85.9422	78.54089	52.45457
1391	72.34407	75.64966	86.26099	79.00382	53.26129
1390	72.79032	76.10943	86.57453	79.45456	54.09771
1389	73.24423	76.58531	86.88638	79.91609	54.99996
1388	73.72601	77.10189	87.19957	80.41595	56.03632
1387	74.2197	77.63601	87.50155	80.93111	57.16426
1386	74.68041	78.12735	87.78172	81.402	58.21394
1385	75.10456	78.56732	88.05101	81.81681	59.12252
1384	75.52326	78.99265	88.32031	82.2059	59.97917
1383	75.94337	79.41662	88.58177	82.5824	60.85165
1382	76.34615	79.82302	88.8254	82.93865	61.71927
1381	76.7293	80.20923	89.05704	83.27798	62.55936
1380	77.10995	80.59056	89.28606	83.61269	63.39522
1379	77.4868	80.96304	89.50817	83.93634	64.22399
1378	77.84187	81.30569	89.71762	84.23261	64.99321
1377	78.17948	81.62239	89.9218	84.50638	65.69466
1376	78.52379	81.94233	90.12683	84.77624	66.39904
1375	78.87638	82.27726	90.32168	85.04363	67.15933
1374	79.21085	82.60703	90.49535	85.2951	67.93101
1373	79.51849	82.91509	90.658	85.52913	68.63978
1372	79.81694	83.20639	90.82271	85.75237	69.27782
1371	80.11446	83.48558	90.98692	85.96316	69.87525
1370	80.40884	83.75615	91.14655	86.16379	70.45989
1369	80.70516	84.03031	91.30677	86.36967	71.06202
1368	81.00539	84.31151	91.46892	86.58547	71.68668
1367	81.29363	84.57929	91.6231	86.79077	72.28545
1366	81.5594	84.81921	91.76469	86.97145	72.81822
1365	81.8212	85.04972	91.90187	87.14268	73.32285
1364	82.10229	85.2984	92.03946	87.32564	73.87765
1363	82.39112	85.56142	92.1704	87.51868	74.49681
1362	82.65696	85.81113	92.29324	87.70821	75.10661
1361	82.90085	86.0422	92.41931	87.89506	75.65792
1360	83.14364	86.26744	92.55095	88.08218	76.17123
1359	83.3848	86.48544	92.67712	88.25972	76.66236
1358	83.6135	86.6902	92.79412	88.42374	77.12575
1357	83.83543	86.89078	92.91052	88.58802	77.57515
1356	84.06154	87.09686	93.02874	88.76242	78.0345
1355	84.28458	87.29849	93.13838	88.93585	78.49283
1354	84.49211	87.48273	93.23585	89.09682	78.91923
1353	84.69186	87.65706	93.3326	89.25287	79.31624
1352	84.89651	87.83364	93.43528	89.4132	79.70921
1351	85.09821	88.00729	93.53625	89.57268	80.09746
1350	85.28343	88.17016	93.63009	89.72713	80.46289
1349	85.45695	88.32933	93.72283	89.88477	80.81092
1348	85.631	88.49158	93.8172	90.04802	81.15825

1347	85.80355	88.64734	93.90608	90.20498	81.49703
1346	85.96835	88.78895	93.9879	90.35139	81.81302
1345	86.13199	88.92633	94.07142	90.49978	82.11865
1344	86.30091	89.06766	94.159	90.65522	82.42833
1343	86.46691	89.20298	94.24079	90.80406	82.72497
1342	86.62253	89.32384	94.31095	90.93878	82.99015
1341	86.77669	89.44209	94.37587	91.07385	83.24665
1340	86.93737	89.57158	94.44173	91.22298	83.53014
1339	87.09174	89.70409	94.50735	91.37645	83.82814
1338	87.22739	89.82739	94.57504	91.52177	84.10258
1337	87.35501	89.94809	94.65085	91.66439	84.35473
1336	87.48613	90.07181	94.72987	91.80762	84.60451
1335	87.61342	90.18729	94.79983	91.94134	84.84394
1334	87.72979	90.28695	94.86	92.06242	85.05825
1333	87.8449	90.38185	94.92103	92.18321	85.26138
1332	87.96783	90.48223	94.98539	92.30982	85.47351
1331	88.09064	90.58133	95.04402	92.43204	85.68549
1330	88.20441	90.67218	95.09451	92.54453	85.87995
1329	88.31539	90.76243	95.14554	92.65751	86.06586
1328	88.42968	90.85767	95.19936	92.77541	86.25772
1327	88.5389	90.94793	95.24733	92.88587	86.44358
1326	88.6362	91.02539	95.28703	92.98135	86.60767
1325	88.72982	91.09821	95.32769	93.07163	86.76265
1324	88.82758	91.17418	95.37414	93.16444	86.92659
1323	88.92339	91.24728	95.42095	93.25341	87.09048
1322	89.01213	91.31325	95.46587	93.33528	87.23964
1321	89.10248	91.38154	95.51397	93.41963	87.38505
1320	89.20118	91.45883	95.56429	93.51104	87.54239
1319	89.29922	91.53601	95.60739	93.59933	87.70037
1318	89.38806	91.60528	95.64161	93.67816	87.84207
1317	89.47464	91.6742	95.67646	93.75497	87.97739
1316	89.56532	91.74877	95.71556	93.83264	88.12125
1315	89.652	91.8209	95.75193	93.90216	88.26415
1314	89.72713	91.88449	95.78292	93.96146	88.39338
1313	89.79708	91.94719	95.81485	94.02189	88.51983
1312	89.86836	92.01447	95.84961	94.08759	88.65586
1311	89.93588	92.07837	95.88065	94.14784	88.78905
1310	89.99694	92.13379	95.90618	94.19805	88.90646
1309	90.06067	92.1888	95.93256	94.24811	89.02073
1308	90.13198	92.24854	95.96191	94.30294	89.14615
1307	90.20126	92.30484	95.98899	94.35407	89.27165
1306	90.26169	92.35262	96.0124	94.39796	89.38295
1305	90.32136	92.4003	96.03676	94.4438	89.48996
1304	90.38754	92.45387	96.06202	94.49494	89.60608
1303	90.45359	92.50614	96.08317	94.54134	89.72229
1302	90.51248	92.55152	96.10176	94.57814	89.82654
1301	90.56877	92.59614	96.12496	94.61413	89.92739
1300	90.62635	92.64385	96.15194	94.65411	90.03449
1299	90.67889	92.68737	96.17406	94.69053	90.13701
1298	90.723	92.72303	96.18946	94.71974	90.22477
1297	90.76697	92.75882	96.20472	94.74946	90.30946
1296	90.81599	92.79892	96.22105	94.78309	90.40223
1295	90.86271	92.83537	96.23222	94.81314	90.4918
1294	90.90166	92.86364	96.23759	94.83649	90.56702
1293	90.93899	92.891	96.24413	94.85969	90.63894
1292	90.97914	92.92142	96.25418	94.88388	90.71918
1291	91.01598	92.94755	96.26343	94.90118	90.79824
1290	91.04595	92.96601	96.27172	94.91103	90.86593
1289	91.07589	92.98521	96.2839	94.92377	90.93187

1288	91.10898	93.00938	96.29859	94.94278	91.00479
1287	91.13704	93.03005	96.30835	94.95961	91.07304
1286	91.15574	93.0417	96.31198	94.97118	91.12692
1285	91.17304	93.05056	96.31508	94.98443	91.17822
1284	91.1942	93.06039	96.31849	94.99983	91.2375
1283	91.21297	93.06503	96.31797	95.00834	91.29464
1282	91.22528	93.06239	96.31489	95.00887	91.34062
1281	91.23729	93.06062	96.31522	95.01195	91.38688
1280	91.25187	93.06304	96.31804	95.02138	91.44364
1279	91.26134	93.06211	96.31678	95.02901	91.50035
1278	91.26205	93.05519	96.3116	95.03182	91.54678
1277	91.26187	93.05053	96.30842	95.03662	91.59185
1276	91.26507	93.05033	96.30656	95.04343	91.643
1275	91.2637	93.04342	96.29921	95.04176	91.68862
1274	91.25204	93.0228	96.28577	95.02852	91.71985
1273	91.23609	92.99595	96.27191	95.01351	91.74893
1272	91.2209	92.96987	96.25799	95.00219	91.78719
1271	91.20128	92.94007	96.23954	94.98883	91.82521
1270	91.17309	92.9024	96.21843	94.97145	91.85303
1269	91.14037	92.8614	96.20036	94.95652	91.87919
1268	91.10388	92.81893	96.18213	94.94417	91.911
1267	91.05639	92.76833	96.15492	94.92534	91.93823
1266	90.99694	92.70717	96.11995	94.89849	91.95408
1265	90.93639	92.64249	96.08749	94.87299	91.97082
1264	90.88083	92.57676	96.06026	94.85164	91.9967
1263	90.82168	92.50175	96.03053	94.82545	92.01877
1262	90.74942	92.41241	95.99421	94.78976	92.02625
1261	90.66541	92.31436	95.95539	94.75041	92.03026
1260	90.57376	92.21181	95.91602	94.7104	92.04316
1259	90.4737	92.10125	95.87281	94.66568	92.05828
1258	90.36665	91.98223	95.82536	94.61761	92.06718
1257	90.25907	91.86094	95.77624	94.57324	92.07599
1256	90.15144	91.73749	95.7229	94.53009	92.08802
1255	90.03499	91.60297	95.66033	94.47651	92.09118
1254	89.90562	91.45484	95.59169	94.4107	92.07909
1253	89.77116	91.30312	95.52576	94.34445	92.06523
1252	89.63898	91.15535	95.46409	94.28413	92.06029
1251	89.50686	91.0075	95.40082	94.22329	92.05516
1250	89.37148	90.85481	95.3341	94.15754	92.04115
1249	89.23551	90.70011	95.26693	94.09151	92.02645
1248	89.10033	90.54573	95.19802	94.0264	92.01748
1247	88.96107	90.38843	95.12302	93.95553	92.00483
1246	88.81483	90.22811	95.04466	93.87716	91.983
1245	88.66615	90.07119	94.97086	93.79883	91.96385
1244	88.51985	89.92014	94.90262	93.72491	91.95473
1243	88.37561	89.76918	94.83359	93.65173	91.94296
1242	88.23324	89.6151	94.76081	93.57766	91.91758
1241	88.09526	89.46257	94.68641	93.5052	91.88706
1240	87.96104	89.31435	94.60981	93.4315	91.86097
1239	87.82632	89.16672	94.52895	93.35022	91.83428
1238	87.69134	89.01901	94.44822	93.26488	91.80361
1237	87.56099	88.8777	94.37456	93.18627	91.77825
1236	87.43446	88.74524	94.30569	93.11458	91.76046
1235	87.30419	88.61439	94.23235	93.03803	91.73541
1234	87.16839	88.47943	94.15194	92.95201	91.69577
1233	87.03519	88.34447	94.07049	92.86539	91.6561
1232	86.9104	88.21509	93.99169	92.78441	91.62809
1231	86.79011	88.08962	93.91357	92.70425	91.60182
1230	86.66938	87.96456	93.83572	92.62044	91.56591

1229	86.5494	87.84141	93.76028	92.53586	91.52581
1228	86.4314	87.72253	93.68543	92.45221	91.48717
1227	86.31205	87.6066	93.60682	92.36629	91.44166
1226	86.19039	87.49271	93.52558	92.27848	91.38501
1225	86.07189	87.38289	93.44704	92.19375	91.32972
1224	85.96021	87.27644	93.37166	92.11146	91.28422
1223	85.85141	87.16816	93.29505	92.02479	91.23762
1222	85.74105	87.05627	93.21601	91.93259	91.17965
1221	85.63072	86.94569	93.13644	91.84101	91.11741
1220	85.52309	86.83962	93.05469	91.75157	91.05839
1219	85.41668	86.73465	92.96748	91.659	90.9954
1218	85.30999	86.62814	92.87826	91.5631	90.92265
1217	85.20518	86.52364	92.795	91.47119	90.84895
1216	85.10289	86.42438	92.71918	91.38595	90.78061
1215	84.99855	86.32734	92.64447	91.30118	90.70847
1214	84.88887	86.22886	92.56651	91.2124	90.62561
1213	84.7777	86.13083	92.48731	91.12223	90.54139
1212	84.67126	86.03639	92.40988	91.03289	90.4643
1211	84.57089	85.94377	92.33441	90.94271	90.38681
1210	84.47367	85.84893	92.26018	90.85254	90.30038
1209	84.3764	85.75056	92.18572	90.76628	90.20978
1208	84.27612	85.64931	92.10794	90.68339	90.1202
1207	84.1709	85.54618	92.02656	90.59942	90.02622
1206	84.06318	85.4446	91.94789	90.51496	89.92551
1205	83.95848	85.34927	91.87816	90.4353	89.82817
1204	83.85809	85.25986	91.81446	90.35974	89.74042
1203	83.75714	85.16994	91.74783	90.28061	89.65375
1202	83.65186	85.07507	91.67426	90.19451	89.56077
1201	83.54459	84.97786	91.59687	90.10634	89.46705
1200	83.43866	84.88234	91.51862	90.02039	89.37701
1199	83.33299	84.78793	91.43927	89.93544	89.28336
1198	83.22456	84.69163	91.35897	89.85	89.18123
1197	83.11253	84.59224	91.27918	89.76458	89.07784
1196	82.99717	84.48975	91.19989	89.6777	88.97804
1195	82.87838	84.38456	91.12022	89.58694	88.87484
1194	82.75828	84.27958	91.04089	89.49462	88.76404
1193	82.6414	84.17869	90.96233	89.40548	88.65372
1192	82.52935	84.081	90.88234	89.31876	88.54917
1191	82.41818	83.98102	90.79973	89.22971	88.44306
1190	82.30348	83.87632	90.71789	89.13828	88.33005
1189	82.18491	83.7703	90.64001	89.04872	88.21688
1188	82.06342	83.66516	90.56295	88.96081	88.10829
1187	81.93738	83.55778	90.48113	88.87016	87.99746
1186	81.80494	83.44581	90.39466	88.77708	87.88013
1185	81.66745	83.33249	90.30828	88.68682	87.76389
1184	81.52747	83.22143	90.22418	88.60049	87.65327
1183	81.38563	83.11146	90.14151	88.51385	87.54006
1182	81.24198	83.00074	90.06136	88.42555	87.41863
1181	81.09792	82.89123	89.9861	88.33851	87.29714
1180	80.95398	82.78405	89.91403	88.25255	87.18292
1179	80.80783	82.67465	89.83983	88.16398	87.07001
1178	80.65757	82.55791	89.76111	88.07362	86.9517
1177	80.50524	82.43547	89.6803	87.98719	86.83291
1176	80.35408	82.31289	89.60034	87.90611	86.71946
1175	80.20393	82.19203	89.52212	87.82523	86.6069
1174	80.05226	82.07136	89.44595	87.74157	86.49034
1173	79.89875	81.95123	89.37174	87.65796	86.37389
1172	79.7455	81.83306	89.29771	87.57617	86.26035
1171	79.59327	81.71441	89.22197	87.49341	86.14286

1170	79.44043	81.59024	89.14515	87.4078	86.01641
1169	79.28569	81.45923	89.06895	87.32115	85.88671
1168	79.12928	81.32461	88.99266	87.2341	85.75891
1167	78.97102	81.18913	88.9138	87.14425	85.62894
1166	78.80992	81.0534	88.83154	87.0511	85.49486
1165	78.6465	80.91913	88.7468	86.95729	85.36513
1164	78.48342	80.78924	88.65989	86.86342	85.24592
1163	78.32258	80.66371	88.57065	86.76682	85.1311
1162	78.16326	80.53898	88.48019	86.66714	85.01441
1161	78.00405	80.41293	88.39001	86.56785	84.90044
1160	77.84476	80.28703	88.29993	86.47072	84.79376
1159	77.68497	80.16259	88.20867	86.37339	84.68775
1158	77.52229	80.03786	88.1155	86.27386	84.57433
1157	77.35412	79.91035	88.01978	86.17277	84.45527
1156	77.18052	79.7795	87.92024	86.07018	84.33426
1155	77.00412	79.64553	87.81703	85.9646	84.20777
1154	76.82766	79.5081	87.71333	85.85625	84.07319
1153	76.65211	79.3675	87.61274	85.74707	83.93627
1152	76.47605	79.22484	87.51588	85.63663	83.80105
1151	76.29584	79.07959	87.42024	85.52236	83.66129
1150	76.10787	78.92873	87.32216	85.40395	83.51038
1149	75.912	78.76944	87.21801	85.28334	83.35121
1148	75.71184	78.60134	87.10559	85.16015	83.18851
1147	75.51086	78.42597	86.9865	85.03254	83.02097
1146	75.30996	78.24601	86.86569	84.90315	82.84877
1145	75.10915	78.06499	86.74691	84.77852	82.67853
1144	74.90873	77.88461	86.62917	84.66005	82.51194
1143	74.70678	77.70156	86.50852	84.54007	82.33885
1142	74.49894	77.51029	86.38253	84.40963	82.151
1141	74.28395	77.31027	86.2523	84.26732	81.95421
1140	74.06672	77.10696	86.12108	84.11824	81.75809
1139	73.85181	76.90335	85.99091	83.96664	81.56187
1138	73.63632	76.69425	85.8597	83.81221	81.35962
1137	73.41366	76.47237	85.72227	83.65203	81.15101
1136	73.18194	76.23647	85.57563	83.48425	80.93749
1135	72.94332	75.99012	85.42237	83.30986	80.71497
1134	72.69713	75.73533	85.267	83.13166	80.47983
1133	72.43964	75.47207	85.1104	82.95106	80.23609
1132	72.17005	75.20167	84.95041	82.76621	79.98822
1131	71.89095	74.9257	84.786	82.57371	79.73285
1130	71.60297	74.64255	84.6169	82.37146	79.46571
1129	71.30413	74.34963	84.44014	82.15875	79.19071
1128	70.99451	74.04798	84.25168	81.93484	78.91404
1127	70.67602	73.7401	84.05164	81.69879	78.63452
1126	70.34768	73.4246	83.84417	81.45007	78.34739
1125	70.00684	73.09779	83.63123	81.18809	78.0527
1124	69.65499	72.75963	83.41	80.91166	77.75298
1123	69.29683	72.41307	83.17718	80.62018	77.44789
1122	68.93371	72.05874	82.93258	80.31451	77.13871
1121	68.56386	71.69558	82.67746	79.99599	76.83271
1120	68.18805	71.32569	82.41187	79.66507	76.53553
1119	67.8085	70.95307	82.13504	79.32184	76.24387
1118	67.42373	70.57886	81.84709	78.96718	75.95304
1117	67.03204	70.20302	81.54983	78.60315	75.6666
1116	66.63861	69.82844	81.24624	78.23171	75.39076
1115	66.25054	69.45674	80.93799	77.85275	75.12335
1114	65.86633	69.08307	80.62369	77.46399	74.85734
1113	65.47978	68.70295	80.30177	77.06465	74.59219
1112	65.09261	68.32179	79.9749	76.65887	74.3325

1111	64.71284	67.94912	79.64841	76.25271	74.07766
1110	64.34205	67.58604	79.32423	75.84814	73.82219
1109	63.97582	67.22777	79.0011	75.4436	73.56567
1108	63.61572	66.87527	78.68052	75.03996	73.31346
1107	63.26799	66.53285	78.36577	74.63999	73.06684
1106	62.93103	66.19685	78.05405	74.24137	72.82039
1105	62.59788	65.85975	77.73717	73.83747	72.57071
1104	62.27107	65.52482	77.4129	73.42752	72.32083
1103	61.96109	65.20448	77.08855	73.01942	72.07473
1102	61.66922	64.90424	76.77081	72.61969	71.83338
1101	61.38595	64.62023	76.45923	72.22737	71.59761
1100	61.10738	64.3509	76.15254	71.84034	71.36919
1099	60.83793	64.09688	75.85275	71.45919	71.14725
1098	60.57736	63.85184	75.55985	71.08218	70.92874
1097	60.32031	63.60762	75.27085	70.70466	70.71311
1096	60.06973	63.36819	74.98697	70.32774	70.50215
1095	59.83561	63.14433	74.71337	69.95977	70.29527
1094	59.61815	62.93496	74.44901	69.60523	70.09045
1093	59.40685	62.72896	74.18648	69.26024	69.88953
1092	59.19785	62.52471	73.92481	68.92234	69.69629
1091	58.99733	62.33205	73.6722	68.59623	69.50901
1090	58.80683	62.15445	73.43305	68.28608	69.32128
1089	58.62048	61.98428	73.20219	67.9904	69.13077
1088	58.43745	61.81653	72.97266	67.70681	68.94045
1087	58.26131	61.65235	72.73672	67.4323	68.75057
1086	58.08685	61.48888	72.47945	67.15737	68.55656
1085	57.90403	61.32046	72.19063	66.87192	68.35586
1084	57.71582	61.15039	71.88953	66.58068	68.14976
1083	57.53563	60.98735	71.61863	66.30039	67.93735
1082	57.36606	60.83053	71.40107	66.03705	67.71467
1081	57.19634	60.67174	71.21734	65.77702	67.4809
1080	57.02028	60.50965	71.0304	65.50283	67.23851
1079	56.8406	60.34798	70.82062	65.20704	66.98607
1078	56.65517	60.18148	70.5896	64.88844	66.71787
1077	56.45571	59.99949	70.3439	64.5473	66.43259
1076	56.24283	59.80336	70.08873	64.19032	66.13476
1075	56.02692	59.60496	69.83013	63.82909	65.82527
1074	55.81146	59.40788	69.56999	63.46638	65.49808
1073	55.59074	59.20469	69.30206	63.09372	65.14945
1072	55.36445	58.99206	69.02104	62.7067	64.783
1071	55.13837	58.77344	68.73111	62.31178	64.40209
1070	54.9097	58.54772	68.44015	61.91372	64.0042
1069	54.66677	58.30941	68.1505	61.50726	63.58605
1068	54.40496	58.05925	67.85972	61.08652	63.14779
1067	54.12948	57.80177	67.56455	60.65289	62.68835
1066	53.84316	57.53431	67.26078	60.20957	62.20388
1065	53.54613	57.25191	66.94629	59.75826	61.69612
1064	53.24624	56.95994	66.62681	59.30464	61.17541
1063	52.95292	56.66694	66.31127	58.85602	60.64887
1062	52.66063	56.36902	66.00006	58.41012	60.11186
1061	52.35536	56.05743	65.68621	57.95743	59.55728
1060	52.03745	55.7377	65.36866	57.49708	58.98739
1059	51.72147	55.42346	65.05413	57.03871	58.40944
1058	51.41289	55.11398	64.74463	56.58617	57.82554
1057	51.10239	54.79687	64.43501	56.13268	57.2353
1056	50.7843	54.47099	64.12417	55.67467	56.64291
1055	50.46319	54.14728	63.81621	55.21621	56.05153
1054	50.14004	53.82684	63.50816	54.75635	55.45529
1053	49.80988	53.49917	63.18991	54.28688	54.84821

1052	49.47642	53.16465	62.86089	53.80752	54.23812
1051	49.15042	52.83737	62.53243	53.32786	53.63886
1050	48.82963	52.52099	62.20844	52.84896	53.05093
1049	48.5003	52.20444	61.87966	52.36043	52.46394
1048	48.16121	51.885	61.54215	51.86028	51.87556
1047	47.8261	51.57289	61.20458	51.35867	51.2935
1046	47.5018	51.27138	60.87303	50.85936	50.72255
1045	47.18347	50.97434	60.54436	50.35591	50.16347
1044	46.87037	50.68383	60.2179	49.84808	49.62066
1043	46.56642	50.40957	59.89777	49.34299	49.09765
1042	46.26654	50.15053	59.5806	48.8385	48.58866
1041	45.96169	49.89629	59.25573	48.32336	48.08726
1040	45.6572	49.64696	58.92168	47.79638	47.59996
1039	45.3666	49.4125	58.58847	47.26777	47.13814
1038	45.08536	49.19027	58.25919	46.73837	46.69863
1037	44.79039	48.96318	57.92322	46.19573	46.26582
1036	44.46966	48.72505	57.57314	45.63483	45.83208
1035	44.13885	48.49259	57.21755	45.06664	45.40666
1034	43.82835	48.28989	56.87374	44.50388	45.00842
1033	43.56522	48.13309	56.55708	43.95436	44.65788
1032	43.36223	48.02792	56.27663	43.42819	44.36759
1031	43.20703	47.96596	56.02838	42.93172	44.12795
1030	43.06523	47.92451	55.79329	42.45363	43.91037
1029	42.91101	47.88563	55.55506	41.97705	43.69596
1028	42.7522	47.85418	55.31905	41.50573	43.49273
1027	42.61199	47.84463	55.10166	41.05919	43.31426
1026	42.4946	47.8567	54.90535	40.64295	43.15471
1025	42.38842	47.88065	54.72093	40.24555	43.00123
1024	42.29298	47.91868	54.55021	39.86423	42.85746
1023	42.21758	47.98011	54.4055	39.50947	42.73392
1022	42.15958	48.06064	54.28794	39.1841	42.62525
1021	42.10918	48.14764	54.18691	38.88166	42.51807
1020	42.07193	48.24216	54.10142	38.60592	42.41322
1019	42.0623	48.35553	54.04275	38.36833	42.31979
1018	42.07825	48.48769	54.01513	38.1658	42.23459
1017	42.10591	48.62864	54.01213	37.98444	42.14792
1016	42.1458	48.77784	54.03197	37.82491	42.0631
1015	42.21057	48.94292	54.07791	37.70076	41.99089
1014	42.3002	49.12259	54.14403	37.61261	41.93082
1013	42.40286	49.3094	54.21966	37.54833	41.8766
1012	42.51794	49.50595	54.30816	37.50714	41.83324
1011	42.65529	49.72041	54.42287	37.49831	41.8101
1010	42.81424	49.95065	54.56461	37.51736	41.80415
1009	42.98613	50.19081	54.72169	37.54917	41.80829
1008	43.17438	50.44796	54.89074	37.59367	41.8286
1007	43.39005	50.73416	55.07855	37.66389	41.87565
1006	43.6307	51.0469	55.28424	37.75964	41.94736
1005	43.88542	51.37553	55.49852	37.86813	42.03893
1004	44.15713	51.72109	55.72087	37.98896	42.15994
1003	44.45859	52.09215	55.95976	38.13352	42.32216
1002	44.7901	52.48701	56.216	38.30085	42.51871
1001	45.14187	52.89755	56.48203	38.47802	42.73458
1000	45.5146	53.32577	56.75688	38.66352	42.96989
999	45.9171	53.77932	57.04625	38.86759	43.23485
998	46.34623	54.2554	57.34948	39.09128	43.52981
997	46.7891	54.74457	57.66168	39.3279	43.84806
996	47.24261	55.24541	57.98611	39.58236	44.19012
995	47.71334	55.76128	58.32877	39.86621	44.55807
994	48.2016	56.28846	58.68395	40.17613	44.94403

993	48.70235	56.82141	59.04163	40.49953	45.34066
992	49.21741	57.36294	59.40627	40.83867	45.75499
991	49.75051	57.91595	59.79083	41.20615	46.19576
990	50.29533	58.47259	60.19468	41.59997	46.65665
989	50.84447	59.0253	60.60539	42.00671	47.12725
988	51.40395	59.58035	61.02016	42.42633	47.61022
987	51.98361	60.14727	61.4482	42.87166	48.11278
986	52.57924	60.7227	61.89287	43.34615	48.63127
985	53.17922	61.29724	62.34771	43.84357	49.15869
984	53.78226	61.87037	62.81029	44.3669	49.69723
983	54.39386	62.44551	63.28514	44.92624	50.24932
982	55.01182	63.01795	63.77216	45.51986	50.8068
981	55.62962	63.58061	64.2655	46.13626	51.36271
980	56.24801	64.13512	64.7639	46.77201	51.92393
979	56.86958	64.68566	65.27035	47.43001	52.49928
978	57.48826	65.22829	65.78167	48.10433	53.08489
977	58.09624	65.75719	66.28955	48.78396	53.67295
976	58.6948	66.275	66.79114	49.46732	54.26451
975	59.28717	66.78666	67.28903	50.15756	54.86203
974	59.86832	67.28886	67.7818	50.84862	55.45951
973	60.43276	67.77417	68.26358	51.53035	56.04986
972	60.98367	68.23902	68.73125	52.20094	56.63202
971	61.5231	68.68036	69.18375	52.86052	57.20268
970	62.04163	69.09261	69.61706	53.50061	57.75319
969	62.52985	69.47671	70.0279	54.11412	58.28317
968	62.99343	69.84544	70.42001	54.7083	58.8054
967	63.44575	70.21071	70.79918	55.29313	59.32827
966	63.89103	70.5702	71.16445	55.86326	59.8439
965	64.3258	70.91496	71.51299	56.40836	60.3429
964	64.75144	71.24408	71.851	56.93574	60.82843
963	65.17274	71.56202	72.19105	57.46633	61.30591
962	65.58986	71.86949	72.54146	58.01551	61.773
961	66.00194	72.16664	72.90576	58.59114	62.2281
960	66.41335	72.4597	73.28814	59.20203	62.67626
959	66.82737	72.75559	73.69081	59.85208	63.11888
958	67.23878	73.05329	74.10818	60.52955	63.54867
957	67.64155	73.34693	74.53217	61.21533	63.96183
956	68.03862	73.63346	74.96154	61.90001	64.36429
955	68.43639	73.91185	75.39877	62.58384	64.75937
954	68.83447	74.17988	75.8398	63.26566	65.14051
953	69.22799	74.43732	76.27474	63.94225	65.50242
952	69.61443	74.68818	76.69799	64.61355	65.84872
951	69.99129	74.93463	77.11096	65.27888	66.18263
950	70.35301	75.17342	77.51585	65.93255	66.50102
949	70.69784	75.40192	77.91255	66.57079	66.80279
948	71.03261	75.62204	78.30138	67.19806	67.09203
947	71.36408	75.83415	78.68329	67.8195	67.36759
946	71.69021	76.03395	79.05727	68.43303	67.62085
945	72.00538	76.22049	79.42178	69.03483	67.84948
944	72.30834	76.40121	79.7781	69.62569	68.06305
943	72.59986	76.58286	80.12851	70.20556	68.26997
942	72.87875	76.76272	80.47123	70.76806	68.46914
941	73.14623	76.93455	80.80038	71.30671	68.659
940	73.40848	77.09901	81.11157	71.82177	68.84415
939	73.66863	77.26234	81.40588	72.31615	69.02721
938	73.92109	77.42768	81.68801	72.78981	69.20346
937	74.15918	77.59242	81.96133	73.24172	69.36872
936	74.38379	77.75171	82.22478	73.67219	69.52422
935	74.5994	77.90106	82.47458	74.0803	69.67018

934	74.80683	78.03815	82.70945	74.46477	69.80352
933	75.00558	78.1654	82.93314	74.82994	69.92571
932	75.19914	78.28828	83.15087	75.18494	70.04368
931	75.39166	78.40922	83.36416	75.53349	70.15862
930	75.58177	78.5253	83.57134	75.86956	70.26243
929	75.76461	78.63291	83.77203	76.18595	70.3491
928	75.93711	78.73048	83.9679	76.48175	70.42003
927	76.09745	78.81628	84.15962	76.75987	70.47539
926	76.24293	78.88896	84.34607	77.02355	70.51061
925	76.3726	78.95153	84.52666	77.27705	70.5249
924	76.48944	79.00977	84.7016	77.52468	70.5237
923	76.59722	79.06474	84.86979	77.76784	70.5086
922	76.69742	79.11095	85.02916	78.00658	70.47355
921	76.79106	79.14311	85.17952	78.24286	70.41491
920	76.88001	79.16083	85.32346	78.47731	70.33859
919	76.96438	79.16688	85.46432	78.70475	70.25402
918	77.0418	79.16606	85.60418	78.91969	70.1678
917	77.11219	79.16682	85.74283	79.12547	70.08576
916	77.18137	79.17858	85.87784	79.33126	70.01496
915	77.25876	79.20633	86.00713	79.54069	69.96222
914	77.35344	79.25253	86.13331	79.75027	69.93765
913	77.47231	79.32418	86.26307	79.95792	69.95942
912	77.61819	79.43086	86.40018	80.16559	70.04579
911	77.78837	79.5741	86.54085	80.37355	70.20025
910	77.97774	79.74533	86.6787	80.57944	70.41226
909	78.18369	79.93659	86.81216	80.78342	70.67247
908	78.40491	80.14684	86.94418	80.98753	70.97727
907	78.63685	80.37582	87.07693	81.19039	71.31922
906	78.87359	80.61872	87.21076	81.38917	71.6862
905	79.1133	80.8695	87.34674	81.58585	72.07179
904	79.35621	81.1233	87.48581	81.78421	72.47364
903	79.59858	81.37435	87.62585	81.98203	72.88133
902	79.83477	81.6182	87.76275	82.17369	73.27941
901	80.06434	81.85702	87.89404	82.35938	73.66422
900	80.29031	82.09562	88.01895	82.54398	74.04469
899	80.5107	82.33099	88.13654	82.72772	74.42504
898	80.71931	82.55311	88.24712	82.90609	74.79923
897	80.91478	82.75706	88.35445	83.07822	75.16255
896	81.10226	82.94778	88.46281	83.24766	75.51542
895	81.28513	83.13163	88.57169	83.41505	75.85475
894	81.46083	83.30963	88.67573	83.57741	76.1748
893	81.62557	83.47941	88.76956	83.73404	76.47714
892	81.77672	83.63664	88.85055	83.88513	76.76694
891	81.90711	83.77205	88.91689	84.02321	77.03639
890	81.99579	83.86871	88.96313	84.13089	77.25777
889	81.99921	83.89761	88.97534	84.18448	77.38238
888	81.8493	83.80897	88.92867	84.1525	77.32825
887	81.47297	83.53515	88.7915	83.99283	76.97779
886	80.82971	83.01698	88.5345	83.65984	76.2179
885	79.93031	82.22899	88.13512	83.11489	74.99257
884	78.80964	81.1697	87.57321	82.32502	73.30414
883	77.47685	79.82543	86.82295	81.25113	71.16236
882	75.89087	78.15072	85.84752	79.83919	68.54482
881	73.98881	76.09561	84.60411	78.0264	65.42033
880	71.74988	73.6661	83.0689	75.77275	61.81907
879	69.24484	70.96815	81.27522	73.11181	57.8804
878	66.63235	68.19293	79.335	70.1834	53.82691
877	64.11396	65.55703	77.4254	67.21622	49.89143
876	61.89542	63.25791	75.75866	64.48441	46.27033

875	60.18064	61.48176	74.55481	62.28735	43.14645
874	59.18494	60.44495	74.01248	60.95606	40.77609
873	59.12699	60.40221	74.26572	60.82157	39.56509
872	60.14678	61.54247	75.32243	62.07412	39.97751
871	62.16871	63.80221	77.01312	64.57247	42.22638
870	64.85064	66.78781	79.0179	67.81383	46.00409
869	67.71268	69.93314	80.98571	71.15534	50.55996
868	70.34374	72.76156	82.66131	74.10027	55.06772
867	72.53022	75.04625	83.94036	76.43368	58.97633
866	74.25771	76.8003	84.84322	78.17884	62.13184
865	75.62415	78.15691	85.4429	79.46721	64.65365
864	76.73959	79.24877	85.80179	80.42653	66.72052
863	77.67513	80.15856	85.95264	81.13744	68.44951
862	78.46742	80.93067	85.91103	81.64381	69.90538
861	79.14066	81.59497	85.687	81.97601	71.1456
860	79.7142	82.17329	85.28699	82.16232	72.2243
859	80.20131	82.67867	84.71982	82.23281	73.17605
858	80.6156	83.12224	84.01484	82.22906	74.02213
857	80.97807	83.51867	83.25289	82.21809	74.78448
856	81.31229	83.8795	82.60448	82.29555	75.48035
855	81.63628	84.20715	82.33225	82.56348	76.11687
854	81.95998	84.49911	82.69046	83.07886	76.70087
853	82.27469	84.74573	83.73989	83.79807	77.22762
852	82.53395	84.91507	85.23972	84.57173	77.64007
851	82.66717	84.96201	86.76508	85.22487	77.84151
850	82.64776	84.88423	87.97757	85.67513	77.81022
849	82.5516	84.76764	88.79479	85.97911	77.69839
848	82.52033	84.7452	89.31872	86.25524	77.76001
847	82.64586	84.88919	89.65733	86.56474	78.14394
846	82.89607	85.15113	89.85497	86.87722	78.77116
845	83.1623	85.41808	89.95672	87.14109	79.43116
844	83.36265	85.61279	90.05357	87.35268	79.96833
843	83.48559	85.72885	90.22437	87.54485	80.35742
842	83.55663	85.79393	90.46336	87.73443	80.64636
841	83.59521	85.82889	90.6981	87.9053	80.88
840	83.60804	85.84225	90.8686	88.03568	81.07922
839	83.6022	85.84124	90.96842	88.12247	81.25532
838	83.58755	85.83364	91.02215	88.1771	81.41779
837	83.56877	85.82285	91.05197	88.20989	81.56996
836	83.54366	85.80719	91.07012	88.22392	81.7074
835	83.50972	85.78297	91.08381	88.21867	81.82425
834	83.46888	85.74686	91.09484	88.19497	81.92099
833	83.42545	85.69843	91.0993	88.15784	82.0055
832	83.38161	85.64181	91.09366	88.11646	82.08605
831	83.33552	85.58233	91.07927	88.08103	82.1643
830	83.28289	85.5208	91.05986	88.05855	82.23631
829	83.22023	85.45362	91.03891	88.0509	82.29839
828	83.14792	85.37916	91.01985	88.05559	82.35008
827	83.07069	85.30124	91.00391	88.06648	82.39367
826	82.99418	85.22478	90.98627	88.07531	82.43298
825	82.92044	85.15054	90.95999	88.07606	82.47023
824	82.84728	85.07604	90.92597	88.06929	82.50206
823	82.77217	84.99912	90.89345	88.06066	82.52275
822	82.69595	84.91939	90.86789	88.05408	82.53341
821	82.62127	84.83891	90.84414	88.04702	82.54342
820	82.54822	84.76272	90.81425	88.03385	82.56063
819	82.47345	84.69556	90.77698	88.01242	82.58515
818	82.3948	84.63582	90.73581	87.98574	82.61345
817	82.31484	84.57471	90.69211	87.95677	82.64263

816	82.23793	84.50462	90.64528	87.9244	82.66877
815	82.16464	84.42771	90.59797	87.88629	82.68768
814	82.09173	84.3538	90.55557	87.84437	82.70074
813	82.0176	84.28911	90.51932	87.80368	82.71427
812	81.94438	84.22899	90.48292	87.76539	82.72936
811	81.87237	84.1622	90.43742	87.72376	82.73723
810	81.79552	84.08067	90.37818	87.67141	82.72727
809	81.70554	83.98446	90.30695	87.60592	82.69482
808	81.59988	83.87935	90.2291	87.53066	82.63874
807	81.48341	83.77205	90.14936	87.45176	82.55887
806	81.36361	83.66682	90.06914	87.37555	82.46015
805	81.24652	83.5635	89.98766	87.30625	82.35359
804	81.13606	83.45755	89.90627	87.2433	82.24814
803	81.03349	83.34487	89.83057	87.1822	82.14556
802	80.9374	83.22944	89.76627	87.12054	82.04629
801	80.84795	83.12491	89.71438	87.06206	81.95478
800	80.77149	83.0464	89.67247	87.01211	81.87615
799	80.71744	83.00012	89.6387	86.97044	81.8136
798	80.68913	82.98142	89.61267	86.93147	81.77118
797	80.68021	82.98234	89.59341	86.8924	81.75279
796	80.68172	82.99844	89.57933	86.8577	81.75478
795	80.68974	83.02778	89.56966	86.83309	81.76548
794	80.70484	83.06741	89.56356	86.81731	81.77586
793	80.72764	83.11415	89.55851	86.80279	81.7855
792	80.75784	83.16594	89.55207	86.78364	81.79544
791	80.7956	83.21965	89.54523	86.75992	81.80221
790	80.84018	83.27012	89.54127	86.73468	81.80269
789	80.88793	83.31477	89.54078	86.71009	81.79828
788	80.93445	83.35716	89.54011	86.68793	81.79037
787	80.97913	83.40313	89.53606	86.67137	81.7777
786	81.02586	83.45476	89.53079	86.66385	81.76142
785	81.07898	83.51137	89.53105	86.66695	81.74573
784	81.14001	83.57513	89.54332	86.68057	81.73048
783	81.20858	83.65123	89.56921	86.70382	81.71069
782	81.28383	83.7414	89.60361	86.73397	81.68685
781	81.36404	83.84029	89.63689	86.76568	81.66827
780	81.44761	83.94039	89.66127	86.7939	81.66305
779	81.53717	84.03997	89.67796	86.81822	81.67247
778	81.64142	84.14556	89.69833	86.84324	81.6978
777	81.76895	84.26656	89.73676	86.87495	81.74241
776	81.91907	84.40726	89.80003	86.91718	81.80194
775	82.07966	84.56287	89.88172	86.96977	81.86136
774	82.23435	84.72207	89.96619	87.02769	81.90832
773	82.3713	84.87323	90.03947	87.08267	81.94291
772	82.48701	85.00878	90.0975	87.12877	81.97061
771	82.58549	85.12579	90.14367	87.16666	81.99398
770	82.67417	85.2245	90.17987	87.1997	82.01518
769	82.75766	85.30692	90.20343	87.2261	82.03659
768	82.8346	85.37637	90.21409	87.23921	82.05391
767	82.90168	85.43734	90.21951	87.2373	82.05783
766	82.95874	85.49375	90.22894	87.228	82.04773
765	83.00656	85.54544	90.24258	87.21914	82.03413
764	83.04247	85.58698	90.25177	87.20877	82.02336
763	83.06396	85.61204	90.24958	87.18897	82.01007
762	83.07581	85.61957	90.23741	87.1579	81.98991
761	83.08718	85.61507	90.22202	87.12349	81.96806
760	83.10117	85.60718	90.21067	87.09644	81.94907
759	83.11374	85.60409	90.2091	87.08308	81.9293
758	83.12327	85.61074	90.21855	87.0843	81.90642

757	83.13406	85.62599	90.23342	87.09714	81.88598
756	83.14863	85.64297	90.24605	87.11672	81.87144
755	83.1638	85.6555	90.25517	87.13921	81.85818
754	83.17746	85.66361	90.26556	87.16315	81.84409
753	83.19258	85.67118	90.2793	87.18611	81.83564
752	83.21071	85.68048	90.29221	87.20189	81.83641
751	83.22718	85.69256	90.3	87.20397	81.83968
750	83.23725	85.71017	90.30209	87.19165	81.8399
749	83.24299	85.73496	90.29865	87.17043	81.84213
748	83.25039	85.76326	90.29003	87.14706	81.85369
747	83.26302	85.79016	90.28142	87.12595	81.87584
746	83.28112	85.81656	90.28046	87.10799	81.90912
745	83.30259	85.84646	90.28626	87.08928	81.956
744	83.32243	85.87848	90.28691	87.06272	82.01237
743	83.33615	85.90768	90.27304	87.02568	82.06805
742	83.34649	85.93545	90.24874	86.98588	82.12154
741	83.36166	85.96888	90.22433	86.95497	82.18173
740	83.38418	86.00834	90.20425	86.9361	82.24903
739	83.40764	86.04436	90.18761	86.92133	82.30941
738	83.42766	86.07047	90.17513	86.9016	82.35529
737	83.44863	86.09232	90.16758	86.87532	82.39794
736	83.4738	86.11947	90.16015	86.84623	82.44983
735	83.4949	86.1533	90.14555	86.81677	82.50737
734	83.49971	86.18617	90.12179	86.78508	82.56071
733	83.48726	86.20832	90.0925	86.74584	82.60872
732	83.46951	86.21341	90.06122	86.69305	82.65433
731	83.45932	86.20282	90.02977	86.62504	82.69594
730	83.46063	86.18802	89.99965	86.54825	82.73204
729	83.46782	86.18345	89.9712	86.47324	82.76391
728	83.47115	86.19288	89.94282	86.40469	82.78699
727	83.46262	86.2045	89.91318	86.33624	82.79052
726	83.43798	86.19944	89.87986	86.2558	82.77097
725	83.39524	86.16456	89.83567	86.15577	82.73457
724	83.33414	86.10039	89.77328	86.03727	82.68272
723	83.25719	86.0196	89.695	85.90377	82.60521
722	83.16542	85.93222	89.60831	85.75037	82.48577
721	83.04644	85.82526	89.50725	85.56037	82.29683
720	82.86786	85.65861	89.36623	85.31356	81.98702
719	82.58219	85.38174	89.15183	84.99195	81.48246
718	82.12096	84.93211	88.81792	84.56654	80.67925
717	81.37837	84.20749	88.28582	83.98722	79.41653
716	80.25398	83.09946	87.48478	83.22167	77.53497
715	78.79802	81.64753	86.47809	82.33981	75.10829
714	77.33734	80.18124	85.54308	81.55466	72.66267
713	76.37491	79.21943	85.04643	81.13013	71.02913
712	76.26628	79.12864	85.1796	81.20386	70.81195
711	76.95511	79.84707	85.81137	81.68469	71.93979
710	78.03109	80.95052	86.60564	82.32579	73.7483
709	79.04975	81.98674	87.2743	82.90132	75.49979
708	79.79207	82.73836	87.71787	83.31651	76.80942
707	80.26564	83.21743	87.97702	83.58226	77.65803
706	80.55711	83.51266	88.12058	83.73745	78.17116
705	80.73425	83.69081	88.19026	83.81204	78.4671
704	80.83897	83.79185	88.20164	83.82762	78.63208
703	80.89565	83.8417	88.15723	83.79391	78.72066
702	80.90879	83.85125	88.06446	83.70855	78.75108
701	80.8774	83.82377	87.95478	83.57942	78.72756
700	80.8149	83.76744	87.87434	83.43946	78.66712
699	80.74171	83.69239	87.84432	83.32007	78.59149

698	80.66377	83.60356	87.84112	83.21525	78.50866
697	80.57742	83.51001	87.82722	83.09284	78.42336
696	80.49076	83.43342	87.7905	82.93935	78.35261
695	80.41931	83.39101	87.74081	82.77171	78.30934
694	80.36461	83.37553	87.6824	82.60666	78.28203
693	80.31443	83.36526	87.6107	82.44223	78.25004
692	80.26155	83.34901	87.53022	82.27326	78.21123
691	80.20763	83.33153	87.45567	82.10438	78.18003
690	80.15166	83.32023	87.39478	81.93914	78.16506
689	80.09233	83.31956	87.344	81.77398	78.16264
688	80.03819	83.33254	87.30007	81.61056	78.16546
687	79.99599	83.35409	87.26267	81.45728	78.16667
686	79.95504	83.36927	87.22762	81.31256	78.16251
685	79.90218	83.37004	87.19132	81.16417	78.15803
684	79.84366	83.36681	87.15894	81.01003	78.16258
683	79.79195	83.37355	87.13493	80.86366	78.17738
682	79.73921	83.38919	87.10825	80.73517	78.19712
681	79.6678	83.40486	87.06098	80.6213	78.22312
680	79.58258	83.42127	86.99223	80.51725	78.26024
679	79.50629	83.44367	86.9209	80.42324	78.30022
678	79.44075	83.46441	86.86463	80.33543	78.32573
677	79.35949	83.46702	86.82658	80.24486	78.33431
676	79.24626	83.45068	86.80125	80.15162	78.34462
675	79.11064	83.43143	86.77736	80.06173	78.37211
674	78.97118	83.42225	86.74295	79.97485	78.41463
673	78.84594	83.42321	86.70091	79.88834	78.46565
672	78.75597	83.42912	86.67255	79.80775	78.52697
671	78.71786	83.43716	86.67007	79.73687	78.60354
670	78.73365	83.44841	86.66863	79.65881	78.69695
669	78.78898	83.46961	86.60069	79.52765	78.80616
668	78.83202	83.49301	86.43956	79.31815	78.90626
667	78.82989	83.49958	86.30839	79.13078	78.92697
666	78.83383	83.5088	86.27798	79.0344	78.88396
665	78.86553	83.52455	86.28596	78.97238	78.84538
664	78.91235	83.53102	86.27741	78.89996	78.83607
663	78.96586	83.52063	86.24273	78.82226	78.85057
662	79.01936	83.49897	86.19746	78.75762	78.8722
661	79.06457	83.48079	86.15321	78.70392	78.8917
660	79.09683	83.47632	86.10591	78.64604	78.90936
659	79.12157	83.47917	86.05006	78.57527	78.91844
658	79.14754	83.47294	85.98901	78.48907	78.90779
657	79.17409	83.45449	85.9322	78.39212	78.88323
656	79.19263	83.44366	85.89058	78.30788	78.86448
655	79.19468	83.45493	85.86491	78.26117	78.85439
654	79.18242	83.4714	85.83518	78.24304	78.83372
653	79.16971	83.46199	85.77623	78.21833	78.79423
652	79.16887	83.41566	85.68867	78.17448	78.75187
651	79.17791	83.34401	85.60201	78.13494	78.71521
650	79.18382	83.25981	85.54241	78.11997	78.66447
649	79.17682	83.16802	85.50954	78.12147	78.57847
648	79.15597	83.07587	85.4912	78.12532	78.46532
647	79.12005	82.99518	85.48124	78.12972	78.35121
646	79.06428	82.93337	85.47595	78.13575	78.25271
645	78.99441	82.89645	85.47432	78.14994	78.17215
644	78.93259	82.89295	85.48765	78.19767	78.10245
643	78.89672	82.91248	85.52661	78.29885	78.01969
642	78.8771	82.90876	85.57246	78.42239	77.88994
641	78.84596	82.83583	85.58656	78.50069	77.70486
640	78.78992	82.70081	85.55759	78.49999	77.49886

639	78.71924	82.55514	85.51397	78.44773	77.31536
638	78.6446	82.43026	85.47594	78.38553	77.16432
637	78.56016	82.31232	85.42195	78.32629	77.03138
636	78.45623	82.18991	85.32567	78.27174	76.91502
635	78.33548	82.08129	85.20119	78.23103	76.82212
634	78.20966	81.99227	85.08452	78.19713	76.73882
633	78.08882	81.89071	84.98958	78.14272	76.64406
632	77.97985	81.7551	84.91257	78.06257	76.54533
631	77.88614	81.61354	84.85661	77.98407	76.46793
630	77.80196	81.50415	84.81871	77.91455	76.41237
629	77.71407	81.42079	84.77059	77.81577	76.34909
628	77.6093	81.32969	84.68198	77.66445	76.25337
627	77.47296	81.21811	84.55161	77.50775	76.12303
626	77.28978	81.09503	84.39491	77.41393	75.96996
625	77.068	80.96022	84.21538	77.37826	75.81562
624	76.85376	80.80611	84.01667	77.3258	75.68474
623	76.69058	80.64194	83.82495	77.19885	75.57651
622	76.55982	80.48345	83.65604	77.00361	75.45233
621	76.39807	80.32757	83.47535	76.78011	75.28596
620	76.17905	80.16568	83.2356	76.56384	75.10727
619	75.93623	80.00323	82.94226	76.36829	74.95817
618	75.69871	79.83718	82.64896	76.1646	74.82507
617	75.45121	79.63649	82.40133	75.89686	74.66609
616	75.17942	79.37814	82.21567	75.55028	74.48241
615	74.89614	79.07776	82.07095	75.16883	74.28901
614	74.59628	78.76271	81.88243	74.77794	74.04531
613	74.24781	78.45161	81.54526	74.34356	73.70322
612	73.84937	78.1778	81.04535	73.83869	73.30074
611	73.44096	77.97586	80.4812	73.28745	72.92739
610	73.03991	77.81861	79.94153	72.71036	72.6059
609	72.62508	77.63205	79.42516	72.09781	72.2959
608	72.19967	77.39069	78.93128	71.48026	72.00641
607	71.80017	77.13498	78.52289	70.93862	71.7911
606	71.43415	76.88907	78.22705	70.49556	71.62649
605	71.09269	76.63724	77.98227	70.09797	71.41538
604	70.82539	76.39784	77.76594	69.75365	71.13316
603	70.70243	76.23543	77.67057	69.57051	70.86788
602	70.69632	76.17234	77.7807	69.62081	70.69453
601	70.70298	76.16161	78.05878	69.87604	70.59309
600	70.67983	76.16476	78.40666	70.29872	70.51339
599	70.66381	76.18125	78.761	70.87343	70.43757
598	70.65995	76.19073	79.09396	71.53054	70.35622
597	70.6313	76.14993	79.38783	72.15827	70.25611
596	70.60945	76.06598	79.64339	72.69601	70.15255
595	70.68951	75.99651	79.86843	73.12889	70.06866
594	70.87969	75.95093	80.03713	73.41545	69.96692
593	71.06752	75.86397	80.10641	73.51343	69.77517
592	71.17436	75.70144	80.09128	73.47711	69.50202
591	71.23029	75.51463	80.07103	73.4378	69.2499
590	71.25961	75.34729	80.08478	73.44489	69.07549
589	71.21451	75.17398	80.08321	73.41728	68.92586
588	71.07584	74.9785	80.01998	73.28794	68.74925
587	70.90527	74.79268	79.91203	73.08838	68.55635
586	70.74176	74.61558	79.77746	72.86977	68.34579
585	70.53755	74.39307	79.58598	72.63785	68.06941
584	70.26291	74.12751	79.32616	72.41586	67.71762
583	69.97281	73.89439	79.05023	72.25734	67.35055
582	69.69709	73.69631	78.78014	72.11646	67.00056
581	69.38273	73.44472	78.44611	71.84015	66.63629

ACCEPTED MANUSCRIPT

580	69.03206	73.15598	78.00566	71.38805	66.25953
579	68.74952	72.97302	77.52864	70.91791	65.90652
578	68.54257	72.88775	77.06711	70.53591	65.52789
577	68.26101	72.68028	76.57248	70.12897	65.05659
576	67.85872	72.26952	76.07443	69.60045	64.62408
575	67.509	71.86982	75.75515	69.06092	64.46354
574	67.31441	71.62721	75.65758	68.60269	64.52329
573	67.13992	71.38041	75.55879	68.12539	64.50244
572	66.88446	70.99845	75.3115	67.60407	64.28856
571	66.64719	70.63714	75.06095	67.26086	64.02885
570	66.51163	70.47227	74.99225	67.24894	63.8015
569	66.39412	70.41594	75.05981	67.38738	63.51301
568	66.23405	70.32123	75.14239	67.42648	63.1692
567	66.09048	70.20023	75.23346	67.31882	62.9056
566	65.95034	70.05897	75.32302	67.12395	62.67407
565	65.69714	69.77358	75.3153	66.89203	62.26375
564	65.35568	69.30779	75.20536	66.76761	61.71206
563	65.12575	68.84075	75.1603	66.96836	61.34488
562	65.09438	68.53063	75.30704	67.50233	61.3084
561	65.14775	68.33183	75.59066	68.1401	61.37753
560	65.23621	68.19039	75.94337	68.74435	61.35597
559	65.43011	68.16195	76.38425	69.3526	61.29142
558	65.65097	68.20018	76.86288	69.93656	61.20034
557	65.66101	68.11129	77.21303	70.35459	60.92711
556	65.40887	67.86705	77.36212	70.58543	60.44476
555	65.12324	67.69721	77.44183	70.78574	60.00777
554	64.97961	67.72368	77.61094	71.06363	59.81424
553	64.90663	67.75684	77.86318	71.36329	59.74147
552	64.83805	67.63136	78.09664	71.62756	59.6017
551	64.85978	67.45439	78.24707	71.8733	59.37521
550	64.96954	67.35817	78.28919	72.06491	59.07507
549	64.97137	67.23996	78.21774	72.10647	58.65701
548	64.76816	66.96846	78.09357	72.0172	58.20547
547	64.51397	66.62566	78.03124	71.94344	57.93279
546	64.35023	66.34744	78.05961	71.92463	57.80975
545	64.22108	66.12693	78.08132	71.81934	57.5167
544	64.0972	65.98178	78.0395	71.56138	56.95132
543	64.07378	66.03092	77.98463	71.27671	56.40706
542	64.09739	66.18979	77.92865	71.05197	56.09091
541	63.94098	66.13729	77.79828	70.8008	55.83507
540	63.60122	65.79696	77.61296	70.50957	55.5146
539	63.36177	65.48571	77.52776	70.36061	55.27741
538	63.28487	65.35037	77.57097	70.40183	55.12192
537	63.06288	65.0486	77.54175	70.36015	54.77533
536	62.63951	64.38939	77.32509	70.04314	54.28689
535	62.46467	63.83117	77.07265	69.64114	54.12913
534	62.73816	63.85316	76.89124	69.41511	54.34517
533	62.97252	64.19727	76.62402	69.335	54.3142
532	62.747	64.36619	76.17349	69.34156	53.82776
531	62.41598	64.36881	75.84524	69.58244	53.57401
530	62.48876	64.51269	75.90576	70.02432	53.98264

